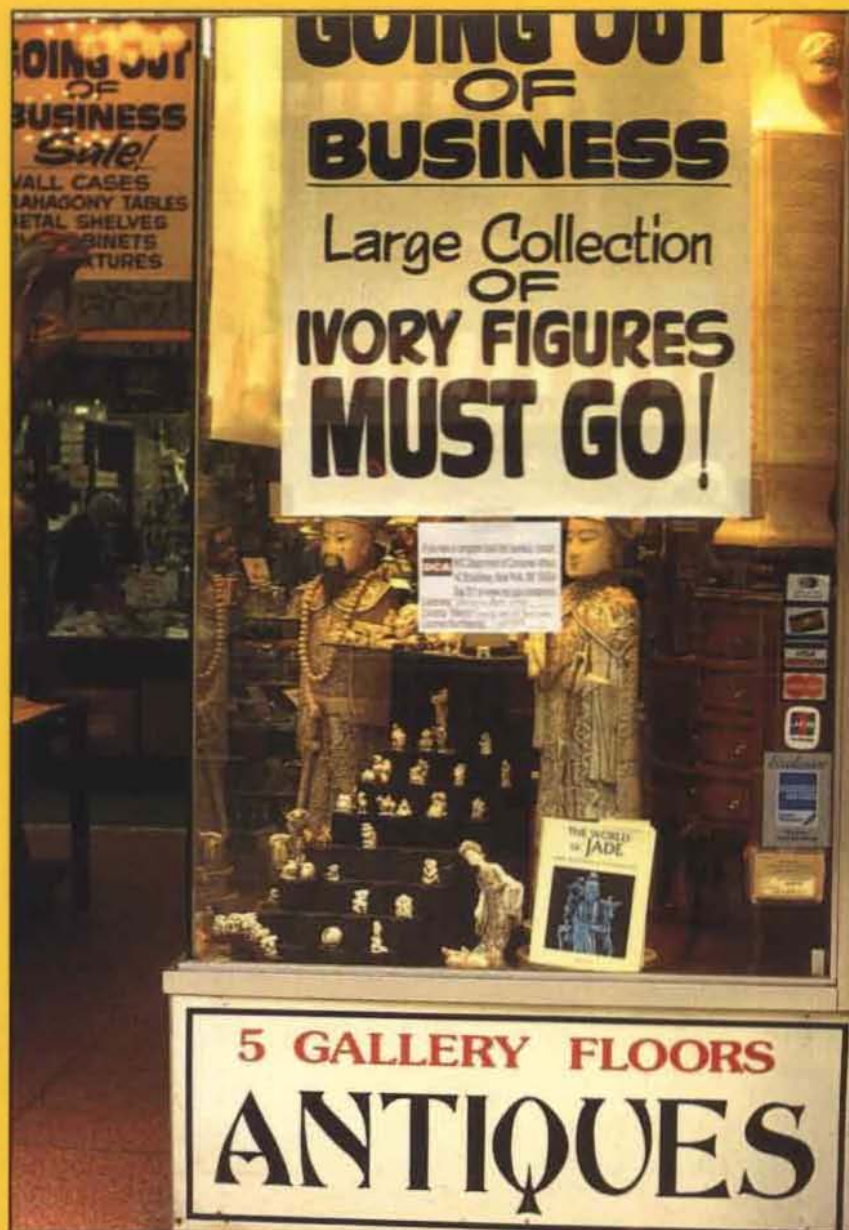


Ivory Markets in the USA

Esmond Martin and Daniel Stiles



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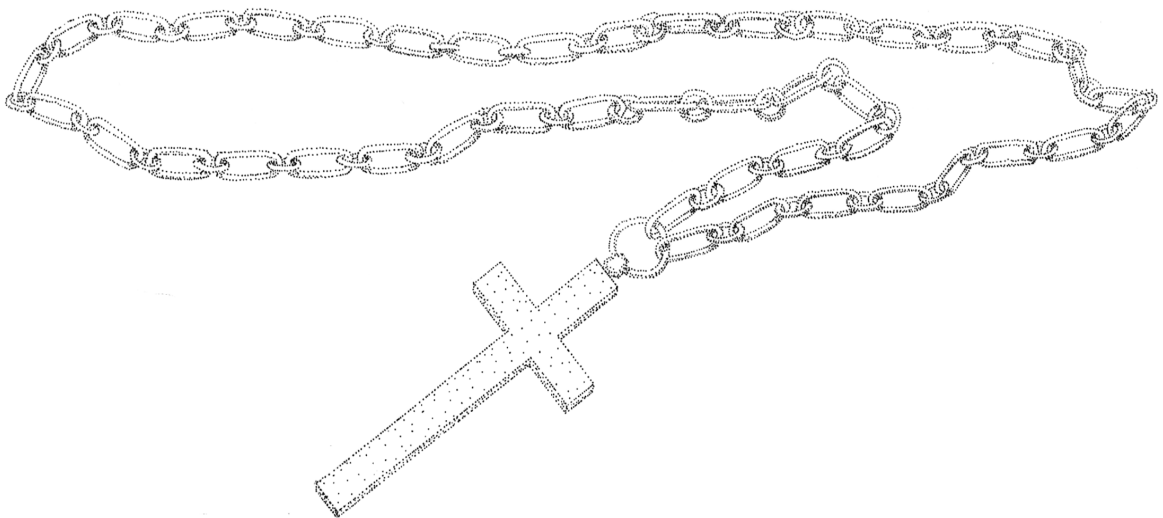
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Drawings by Andrew Kamiti



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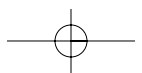
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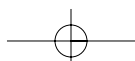
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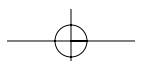
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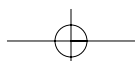
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EXECUTIVE SUMMARY

This report is the fifth in a series of surveys that depicts the status and trends of the elephant ivory markets in a particular region of the world. This investigation covered the United States of America (USA) and Vancouver, Canada. It differs significantly from previous studies of this trade by quantifying the nature and scale of the market. The investigators made the survey between March and December 2006 and March and May 2007. Seventeen cities and towns were selected for study based on their population size and wealth, and tourist importance.

The purpose of the surveys is to enable CITES Parties and governmental and non-governmental wildlife conservation bodies to assess the scale of national ivory markets, and hence their potential impact on elephant populations. This initial round of surveys compared the data obtained with any existing figures to assess the changes that have taken place and to suggest trends in the ivory markets.

CITES entered into force in the USA on 1 July 1975. The United States Fish and Wildlife Service (USFWS), under the Secretary of the Interior, is both the CITES Management Authority and Scientific Authority for the USA. The USFWS shares the responsibility for enforcing all US laws related to CITES and wildlife conservation with the US Department of Agriculture, Animal and Plant Health Inspection Service. CITES regulations and three federal laws mainly govern the ivory trade: The Endangered Species Act (ESA), the African Elephant Conservation Act (AECA) and the Lacey Act. People can legally import only three categories of ivory (with proper documentation) into the USA: antiques (items more than 100 years old), sport-hunted trophy tusks from approved African countries, and pre-Convention (i.e. pre-July 1975) tusks.

The main findings of the USA survey were:

- The survey found 24,004 ivory items in the 657 outlets in the 16 towns and cities visited in the USA, most of which probably were legally for sale.
- New York City had by far the most ivory for sale with 11,376 items, followed by San Francisco (2,777) and Los Angeles (2,605).
- The USA appeared to have the second largest ivory retail market in the world after China/Hong Kong, as determined by numbers of items seen for sale.
- Perhaps 7,400 ivory items, or nearly one-third of the total, may have been crafted after 1989 making their importation illegal, but this estimate is tentative and should be treated with caution because of the difficulties of dating ivory objects.
- The western USA, particularly Honolulu (Hawaii), San Francisco and Los Angeles (California), appeared to have more post-1989 worked ivory for sale than the eastern cities.
- The size of the ivory market has declined since 1989, with many former businesses closing.
- In 1989, retail outlets or workshops sold most worked ivory. Now fewer outlets and workshops exist, and buyers find an increasingly larger proportion of worked and raw ivory from Internet sites, some of which are foreign based.
- The USA has a minimum of 120 full- and part-time ivory craftsmen. This is down from an estimate of 1,400 craftsmen in 1989.
- No large ivory factories remain: craftsmen are scattered throughout the USA working in small workshops, usually at home.
- Craftsmen use mostly old, legal, raw ivory to manufacture new knife, gun and walking stick handles, scrimshaw pieces, cue stick parts and jewellery. They often use broken or damaged ivory items for restoration work.
- The country consumes an estimated less than one tonne of raw ivory annually, down from seven tonnes a year in the late 1980s. Craftsmen each use an average of 8 kg of ivory a year and say that the USA has an adequate supply.
- No official stockpile of raw ivory exists and there has been no government census of private raw ivory stocks in the USA.
- Raw ivory has increased little in price since the CITES ivory trade ban. Adjusting the 1990 price of USD 110-154/kg for 1-5 kg tusks for inflation gives USD 152-212/kg in 2006 USD. The 2006/2007 price was USD 154-346/kg.
- Raw ivory is bought through craftsmen networks or on the Internet. Internet prices are higher than person-to-person trading.

- Tusks of 3-5 kg are more expensive per kilo than tusks of 10 kg, unlike in Asia, Africa or Europe where larger tusks command higher prices.
- Prices per kilo for cut tusk sections, blocks or slabs are much higher than for whole tusks, with 0.2-1.0 kg pieces selling for USD 500-1,760/kg.
- The USA legally imported some 3,530 tusks and about 2,400 raw ivory pieces between 1990 and 2005 according to the UNEP-WCMC CITES Trade Database. The present study found evidence suggesting that some of this material was illegally sold into the commercial market.
- Over 40,000 worked ivory items, excluding personal effects, entered the USA legally from 1995-2007 according to the US Fish and Wildlife Service (USFWS). All these items should have been antiques to be legal. Inspection of pieces (mainly Chinese) in shops suggested that many figurines, netsukes and jewellery items were recently made. Some African items also looked recently made.
- Previous studies found that ivory workshops in Asia and Africa produce fake antiques. Thus, even the imported worked ivory into the USA that seems old could be recently made.
- The USA has a good record of enforcing CITES regulations in respect of international wildlife trade and has reported the largest number of seizures of illegal ivory in the world, according to the Elephant Trade Information System.
- CITES Resolution Conf. 10.10 (Rev. CoP14) recommended that Parties that import and trade elephant ivory implement several trade regulation and control measures. The USA has not yet implemented any of the recommendations.
- US federal and state agencies rarely inspect shops or Internet sites for illegal raw or worked ivory.
- Ivory vendors and craftsmen in general do not believe that the 1999 CITES ivory auction that allowed Japan to buy from southern Africa affected ivory demand in the USA.
- Ivory craftsmen think the ivory industry will continue at its present level and express little concern for the future availability of raw ivory.
- Most ivory vendors and craftsmen in the USA think the authorities should establish a regulated, legal international trade in ivory.
- This study determined that the US ivory market has a small detrimental effect on elephant populations, more from importing illegal worked ivory for retail sale than from local ivory manufacturing. Some contraband gets past Customs and there are no effective internal ivory transport and retail market controls.
- Vancouver, Canada, had a total of 234 ivory items for sale in 45 outlets. There was no Chinese ivory market, as seen in the western USA.

INTRODUCTION

This report is the fifth in a series of surveys that depict the status and trends of the elephant ivory market in a particular region of the world. Previous surveys covered Africa (Martin and Stiles 2000), South and South East Asia (Martin and Stiles 2002), East Asia (Martin and Stiles 2003) and Western Europe (Martin and Stiles 2005). This report deals with the United States of America (USA) which has the largest economy in the world and is a country known for its interest in ivory (Thomsen 1989; Humane Society of the United States [HSUS] 2002; Williamson 2004). This report differs significantly from previous studies of ivory trade of the USA in that for the first time quantitative data are reported on the nature and scale of the internal US ivory market. The survey was made between March and December 2006 and March and May 2007. From east to west, the 16 cities and towns selected for their population size and/or wealth and tourist importance were:

- Boston and Cambridge, Massachusetts
- New York City, New York (Manhattan only)
- Washington, D.C. (including Arlington in Virginia and Kensington in Maryland)
- Palm Beach and West Palm Beach, Florida
- Greater Miami, Florida
- Atlanta, Georgia
- Chicago, Illinois
- Dallas, Texas
- Houston, Texas
- Phoenix, Arizona (including Tempe, Scottsdale, Mesa and Glendale)
- Las Vegas, Nevada
- San Francisco, California (including Sausalito, Berkeley and Oakland)
- Los Angeles, California (including Pasadena)
- San Diego, California (including Oceanside)
- Oahu Island, Hawaii

Vancouver, British Columbia, Canada, was also surveyed because the city has a large immigrant Chinese community with known links to Hong Kong and San Francisco, both important centres of retail ivory marketing. In addition, in March 2005 a Chinese Canadian illegally imported from Hong Kong 30,000 worked ivory items into the Vancouver area, the largest case involving elephant ivory seen in recent Canadian history (Canada Newswire 2007a and b). The investigators wanted to look into the possibility that this ivory was destined to supply a large Vancouver ivory market with links to the USA.

From these ivory market monitoring surveys, CITES Parties and governmental and non-governmental wildlife conservation bodies can assess the scale of various national ivory markets and thus their potential impact on elephant populations. In this initial round of surveys the data obtained are compared with any existing data to assess the changes that have taken place from previous years and suggest trends in the ivory markets. We hope that future surveys using the same methodology will enable the standardization of monitoring and assessment of country and regional ivory markets. We assume a positive correlation between elephant killing and market demand for worked ivory. An increase in ivory sales will indicate a corresponding rise in elephant deaths to supply the ivory needed to satisfy demand, though releases of stored raw and worked ivory stockpiles must be taken into consideration.

The objective of the surveys is to establish a set of baseline indicators of the ivory trade, so that future monitoring and assessment of the effectiveness of policies, laws and enforcement activities related to the internal and international trade in ivory can be carried out. This will help to provide data with which to assess the criteria and standards that need to be met for domestic trade in ivory as called for in CITES Resolution Conf. 10.10 (Rev. CoP14). The main recommendations of this Resolution are:

“1. All elephant range States, and other Parties and non-Parties with an ivory carving industry or internal trade in ivory that is unregulated, should urgently:

- a) prohibit the unregulated domestic sale of ivory (raw, semi-worked or worked). Legislation should include a provision which places the onus of proof of lawful possession upon any person found in possession of ivory in circumstances from which it can reasonably be inferred that such possession was for the purpose of unauthorized transfer, sale, offer for sale, exchange or export or any person transporting ivory for such purposes. Where regulated domestic trade is permitted, it should comply with the provisions of Resolution Conf. 10.10 (Rev. CoP14) (Trade in elephant specimens);
- b) issue instructions to all law enforcement and border control agencies to enforce existing or new legislation rigorously; and
- c) engage in public awareness campaigns publicizing existing or new prohibitions on ivory sales.

2. Those Parties in whose jurisdiction there is an ivory carving industry that is not yet structured, organized or controlled and those Parties designated as ivory importing countries, should adopt comprehensive internal legislative, regulatory and enforcement measures to:

- a) register or license all importers, manufacturers, wholesalers and retailers dealing in raw, semi-worked or worked ivory products;
- b) establish a nationwide procedure, particularly in retail outlets, informing tourists and other non-nationals that they should not purchase ivory in cases where it is illegal for them to import it into their own home countries; and
- c) introduce recording and inspection procedures to enable the Management Authority and other appropriate government agencies to monitor the flow of ivory within the State, particularly by means of:
 - i) compulsory trade controls over raw ivory; and
 - ii) a comprehensive and demonstrably effective reporting and enforcement system for worked ivory.”

One of the CITES key policies related to elephants in need of evaluation is that of permitting renewed and limited international sales of 50 tonnes of ivory to Japan from three southern African nations (Botswana, Namibia and Zimbabwe) that occurred in 1999, and 60 tonnes from three more countries (Botswana, Namibia and South Africa), which was approved in June 2007 at the 55th Meeting of the CITES Standing Committee. Subsequently, the 14th Conference of the Parties of CITES added Zimbabwe to the list of countries approved to sell raw ivory in a later one-off auction to Japan. The total amount of ivory to be sold is yet to be established. Following this sale there will be no sales for nine years from these four countries. The data presented in our five reports will be instrumental in assessing ivory market trends and the effects of the auctions. Any changes in the trade indicators of key countries can be compared with elephant killing as signalled by the Monitoring of the Illegal Killing of Elephants (MIKE) programme, and with ivory seizures as recorded by the Elephant Trade Information System (ETIS), administrated by TRAFFIC for CITES, to ascertain whether significant correlations occur.

Care for the Wild International sponsored the work, with additional funding from Save the Elephants, and also from the Humane Society of the United States and the John Aspinall Foundation.

METHODOLOGY

The word 'ivory' in this report refers to elephant ivory unless specified otherwise. The term 'new' or 'recently-made' ivory refers to items manufactured after the USA African Elephant Conservation Act moratorium on ivory trade which came into effect in 1989. The CITES ban followed in 1990. 'Old worked ivory' means items manufactured before 1989. Even 'old' ivory in the USA, however, is illegal if imported without proper documentation. The age of items was assessed based on signs of wear, style, price and information provided by vendors. This method is hardly infallible. Breakdowns into estimated pre- and post-1989 ages of manufacture are accompanied by the qualifier 'could have been'. This means that the style, condition and price of the item were consistent with either a recently-made piece (post-1989) or a pre-1989 piece. Even if we judged an item to be possibly made before 1989, this in no way attests to its legal status.

The investigators collected data on the same indicators as in their previous surveys: the prices of tusks and of raw ivory pieces, the number of ivory craftsmen, the number of retail outlets selling ivory items, the number of ivory objects seen for retail sale, and their prices. We counted ivory not openly displayed only if the vendor brought it out to show. Interviews with vendors and craftsmen were necessarily opportunistic depending on who was present in the retail outlet or workshop and how knowledgeable or willing they were to provide information. Some information was gleaned from Internet Web sites or in exchanged e-mails. The questions might vary from case to case, but the ultimate objective was to gather as clear picture as possible of the indicator parameters.

The city/town chapters are presented in geographical order starting in the northeast, moving south, and then moving progressively north-south to the west. In each town and city the investigators visited all major flea markets, antique markets, main shopping streets for antiques and crafts, department stores and luxury hotel gift shops. This report describes the ivory for sale in markets and shops. Ivory vendors were asked where and when they obtained their ivory and if they knew of any current ivory manufacture in their area. We searched the Internet and Yellow Pages for retail outlets and craftsmen, and obtained helpful information through the International Ivory Society and the International Netsuke Society (both based in the USA).

This is the first systematic, quantitative study based on field surveys of leading retail American ivory markets. Thus, few data are available on which to assess trends.

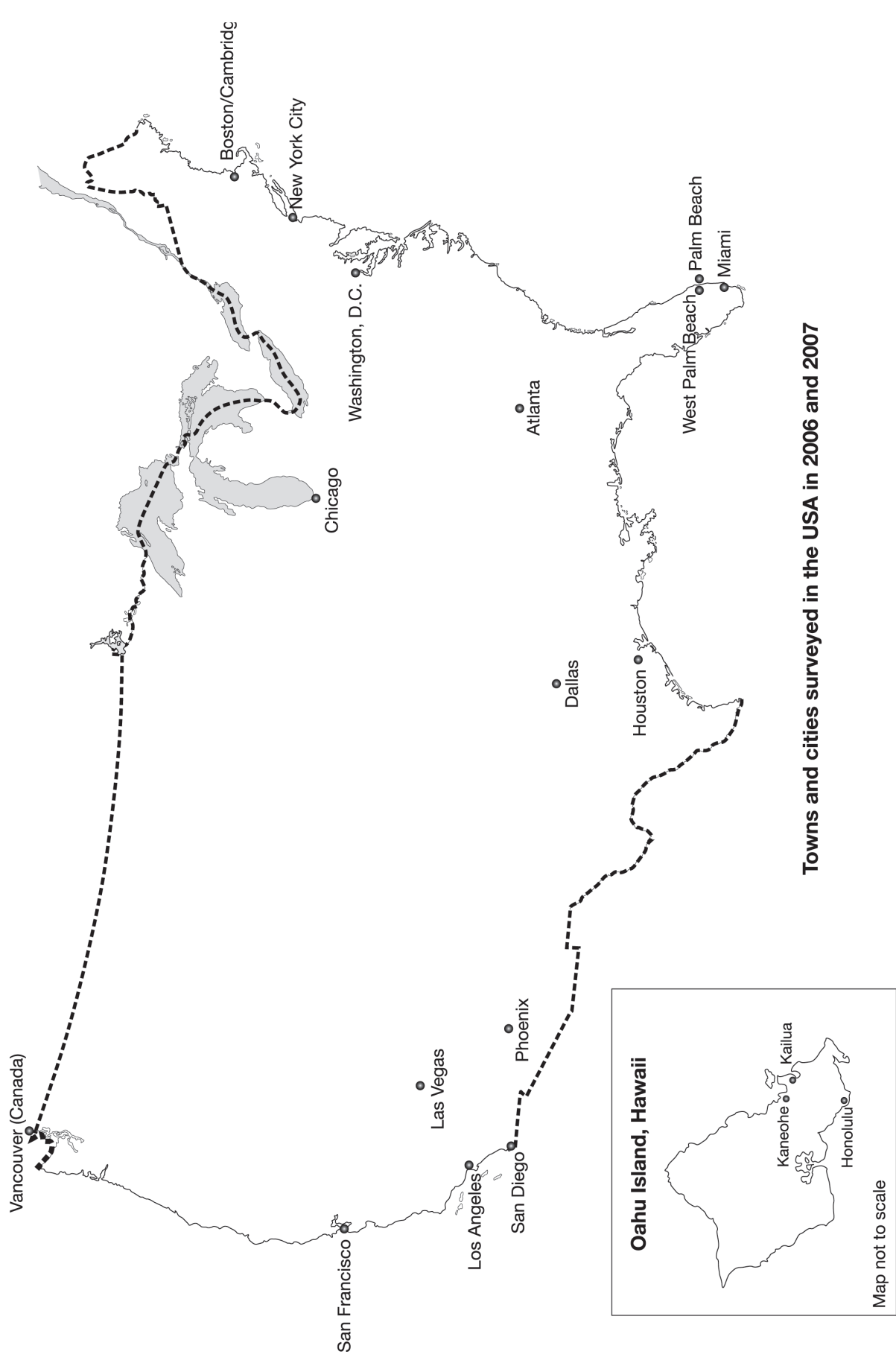
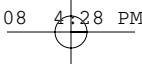
Collecting and analysing price data

The price of ivory, particularly raw ivory, is one of the most important indicators of trends in the market: the reliability and comparability of prices collected and analysed are critical. The criteria that determine the price of raw ivory are (1) size, mainly diameter, (2) weight, (3) whether solid or hollow, (4) smoothness of the grain with no breaks, fissures or blemishes, (5) colour and colour consistency, (6) humidity content leading to the relative hardness of the ivory, and (7) translucency. The relative values of these factors vary according to the intended use but are given here in general order of importance. Normally, the price of a tusk or cut piece of raw ivory is proportional to its size and weight, though the USA differs from other countries in this respect, as will be discussed below.

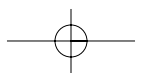
Past prices come from the literature or from interviews with informants. Figures given in the literature are assumed to be average prices for average tusks in terms of the price criteria. Informants, commonly past or present craftsmen, usually have only limited information specific to where they bought the ivory. As much information as possible was gathered on this subject.

A further consideration is the reliability of the prices collected. For worked ivory, pricing is straightforward: the seller either gives it or tags it on the item. Occasionally Web site prices are used; if the outlet also had a retail street shop, it was visited. Usually, the first asking price is reported though sometimes bargained prices are presented.

Raw ivory, however, presents potential pitfalls. Ivory comes from various sources with different purchase prices that vary according to the above price factors. These variable prices then change again at each level of the trading chain. In the USA this begins with the importer or current owner, possibly passes through several intermediaries and ends with ivory carvers and workshop owners. The middlemen sell mainly through Web sites and some can be called dealers or wholesalers.



Towns and cities surveyed in the USA in 2006 and 2007



LEGAL POSITION OF THE IVORY TRADE IN THE USA

CITES entered into force in the USA on 1 July 1975. The United States Fish and Wildlife Service (USFWS), under the Secretary of the Interior, is both the CITES Management Authority and Scientific Authority for the USA. The USFWS and the US Department of Agriculture, Animal and Plant Health Inspection Service share responsibility for enforcing all US laws related to CITES and wildlife conservation. CITES regulations and three federal laws mainly govern the ivory trade: The Endangered Species Act (ESA), the African Elephant Conservation Act (AECA) and the Lacey Act.

The ESA was enacted on 28 December 1973, with the overall objective of conserving endangered or threatened species. According to the law, endangered species are those that are in danger of extinction throughout all or part of their range. Threatened species are those likely to become endangered within the foreseeable future if measures are not taken to ensure their conservation (USFWS 2002). The Asian elephant was listed as endangered in 1976 and the African elephant was listed threatened on 11 June 1978. Under the ESA, it is illegal for any person subject to US jurisdiction to import, export, deliver, receive, carry, transport, ship, sell, or offer for sale in interstate commerce and in the course of a commercial activity, any species of plant or animal that has been listed as threatened or endangered pursuant to the Act (Hoover and Tarr 1997). The ESA also implements application of the import and export regulations for wildlife specimens as noted in the text of CITES. In addition, any person who wishes to engage in international wildlife trade must obtain permission from the Secretary of the Interior and obtain a licence from the USFWS to import and export wildlife specimens. Lastly, the ESA requires that any wildlife imports or exports must be made through ports of entry designated by the USFWS. In spite of all these provisions, it is still possible to import and export certain types of elephant ivory, which will be discussed below.

The AECA was enacted in 1988 because of the recognition that poaching to obtain African ivory was seriously threatening the species. The Act makes it illegal to import raw ivory from any country other than an ivory producing country that belongs to CITES, or to export any raw African elephant ivory from the USA. It further makes it unlawful to import raw or worked ivory that was exported in violation of an ivory-producing country's laws. It is unlawful to import worked ivory, other than personal effects, unless the exporting country has certified that the ivory was from legal sources.

The Lacey Act was enacted by Congress in 1900 and prohibits the import, export, transport, acquisition, receipt, sale, or purchase in interstate or foreign commerce of any fish or wildlife taken, possessed, transported, or sold in violation of any wildlife law or regulation of any state, or in violation of any foreign wildlife law. It also prohibits the import, export, transport, sale, receipt, acquisition or purchase of fish, wildlife, or plants taken, possessed, or sold in violation of any wildlife law, treaty, or regulation of the USA, or in violation of any Indian tribal law (Hoover and Tarr 1997). Furthermore, the Lacey Act prohibits the falsification of information, records, or accounts regarding species that have been imported, exported, transported, sold, purchased, or received in interstate or foreign commerce. The Act makes it illegal to import, export, or transport in interstate commerce, any container or package containing fish or wildlife unless it has previously been plainly marked, labelled, or tagged in accordance with USFWS marking regulations, and authorizes USFWS to detain any package or container being imported into or exported from the USA (Hoover and Tarr 1997). It must be stressed that ivory items imported illegally always remain contraband after their import and both possession and sale are illegal. Proving illegality, of course, gets more difficult the further along the chain from the first illegal point of entry into the country.

The two main exemptions to the import, export and sale of ivory within the USA apply to antique elephant ivory and African trophy tusks. Antique elephant ivory may be imported or exported for commercial purposes when accompanied by a valid CITES pre-Convention certificate issued by the Management Authority of the exporting country. An antique is defined as a specimen at least 100 years old that has not been modified or repaired with more recent ivory since 28 December 1973 (the date of enactment of the ESA). However, Asian elephants and their parts or products cannot be sold across state lines or overseas, or imported or exported, unless the requirements of the ESA are met. Worked or raw pre-Act Asian elephant ivory must meet several criteria. First, the elephant must have been acquired or removed from the wild prior to 14 June, 1976, the listing date of the Asian elephant under the ESA. Second, it may not have been held in the course of a commercial activity (i.e., bought, bartered, offered for sale, or leased) since that time. Third, it must be accompanied by a pre-Act affidavit as outlined in the relevant regulations detailed in the US Code of Federal Regulations (50 Code of Federal Regulations (CFR) §17.4). And fourth, it must be imported or exported for noncommercial purposes

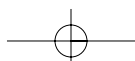


and accompanied by a CITES pre-Convention Certificate showing it was acquired before 1 July, 1975 (USFWS 2003a). Furthermore, pre-Act Asian elephant ivory can be sold only to residents of the same state and once the ivory has entered commerce it loses its pre-Act status. If the ivory does not qualify as antique or pre-Act, a person may apply for a permit for scientific research, or for enhancement of propagation or survival of the species. For import and export, CITES import and export permits are required in addition to ESA permits. CITES permits are issued when the export or the purpose of the import will not be detrimental to species survival, the specimens have been legally acquired, and the import is not for primarily commercial purposes. Also, Asian elephant ivory may be advertised for sale only provided that the advertisement contains a statement that the item may not be sold in interstate or foreign trade until an ESA permit has been obtained from USFWS. The ESA does not restrict the sale of ivory to another resident of the same US state; however, there may be state requirements (USFWS 2002), as discussed below.

No raw ivory is allowed for import to the United States, except for sport-hunted trophy tusks. The elephants of Botswana, Namibia, South Africa and Zimbabwe currently are listed under Appendix II of CITES that allows the non-commercial export of personal sport-hunted trophies, which includes tusks. Under a Special Rule issued as part of the African elephant's listing under the ESA, USFWS must ensure that each country has an ivory quota for the year of export and determine that the import of a sport-hunted trophy will enhance the survival of the species (50 CFR Ch. 1, §17.40). While these four countries meet the criteria of the Special Rule, no permit is needed to import trophy tusks into the USA. The USFWS has also approved the import of trophy tusks from Tanzania, but a permit is required. The ivory may not be re-exported from the USA.

Many US states have enacted laws that apply to the import or sale of elephant ivory. For example, Connecticut law provides the state with the authority to regulate trade in raw elephant ivory or products if the trade in Connecticut is determined to contribute to the extinction or endangerment of elephants (Williamson 2004). In addition, 22 states (Connecticut, Hawaii, Idaho, Illinois, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, New York, North Carolina, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Vermont, and Virginia) either incorporate federally-listed threatened species into the state list or have specific provisions or permit requirements regarding threatened species or federally regulated wildlife (Williamson 2004).

Williamson (2004) states that California had made the import, export and sale of elephant ivory illegal, but there is nothing in the California Fish and Game Code that deals with ivory. There is a California Penal Code section 6530 that prohibits the possession for commercial purposes of elephant parts, but it was challenged in court a few years ago, because the law applies to a species in which limited commercial trade is allowed in the USA (Liz Schwall, California Department of Fish and Game, Enforcement Division, *in litt.* June 2007). Therefore, ivory can be traded in California as long as the trader complies with US federal law. If a criminal case in California involves elephant ivory, the state turns it over to the USFWS (Schwall, pers. comm., June 2007).





HISTORY

The indigenous peoples of North America have an over 2,000-year-long tradition of carving marine ivories. The Inuit, Aleuts and Northwest Indians did not, however, use elephant ivory until recently. In the late 18th and 19th centuries, American sailors of European origin did scrimshaw work (etchings mostly on walrus tusks and whale bones), but rarely on elephant ivory.

Scrimshaw is a cherished form of ancient maritime folk art in the USA. Though most museum pieces are dated to the early 1800s, the art goes as far back as whaling history itself, to 100-200AD. Whole cultures grew up finding use for the meat, blubber, baleen and bones of the whale. Not wanting to discard such parts as the teeth and the jawbones, a new art form was born. A whaler often spent years in pursuit of this valuable mammal and filled idle hours perfecting the art of carving, often giving these miniature masterpieces as gifts upon his return. No one knows the origins of the word scrimshaw and it has a variety of spellings, but in whaling ports it meant anything carved, etched, or fabricated by whalers at sea. The word itself likely comes from British slang, 'scrimshanker', meaning a time waster. Besides depictions of whales and ships, scrimshanders carved lovely native girls, tropical islands, fish and seabirds, their sweethearts back home, their villages, political issues, and war scenes. The earliest examples were made of whalebone from Arctic whaling in the 17th century, but it continued in an almost unbroken tradition through Antarctic whaling in the present century. The most prolific period for scrimshaw was between 1835 and 1870, largely due to the long voyages needed to produce a full cargo of sperm whale oil. New England dominated this industry, but Hawaii also developed an active scrimshawing industry that continues to this day. In 1973 when ESA made it illegal to use sperm whale teeth and walrus ivory, the use of elephant ivory for scrimshawing increased greatly.

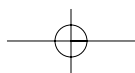
The USA was probably importing elephant tusks by the mid-18th century, and possibly a few were used for carving, but the trade only became significant towards the end of that century. The Connecticut River Valley was the main early centre of ivory craftsmanship and in 1789 Andrew Lord started making ivory combs at his workshop near the river's mouth. Before then, combs were made out of cow horn (display label, Connecticut River Museum, Essex). Lord used a handsaw to make the plates and teeth of the combs (Johnson 1974). Ten years later Phineas Pratt invented a circular saw driven first by hand and later by wind and water to produce about 250 combs a day (Conniff 1987).

In the early 19th century in the Connecticut River Valley, more small workshops were established to make ivory combs. Later, some merged into two large family firms, one in Deep River, Pratt, Read and Company, the other in Ivoryton, Comstock, Cheney and Company. These firms used the water flow in the Deep and Falls rivers respectively for power and became the biggest ivory factories in the USA and perhaps in the world. Up to World War II, these two small towns processed some 85% of all the ivory worked in the USA (Storms and Malcarne 2001). From making combs, they branched out into producing ivory billiard balls, paperknives, bookmarks, business cards, toothpicks, cufflinks, collar buttons, hairbrushes, umbrella handles and other utilitarian items.

In the 19th century, most of the factories' ivory came by ship from Zanzibar via Europe to Salem, Massachusetts, or to New York City. There it passed through Customs and then by smaller craft to Essex and Deep River where horse-drawn wagons and, later, trucks transported the tusks to the factories. Workers put them into vaults monitored for humidity and temperature (display label, Connecticut River Museum, Essex).

In 1839 George Read of Pratt, Read and Company made his first piano keys (Conniff 1987), propelling the Connecticut factories into international importance. At the Crystal Palace Exhibition in London in 1851 a Boston-made piano with an ivory keyboard made in Connecticut took top prize, greatly increasing international demand for American pianos (Farrow *et al.* 2005). In the United States, pianos became *de rigueur* for the middle and upper classes who placed pianos in their parlours to show that they had socially arrived and had the money to buy one. Demand for pianos rose spectacularly. In 1852 the USA manufactured about 9,000 pianos. This figure more than doubled to 22,000 in 1860 and peaked at 350,000 in 1910 when the country became the world's largest piano manufacturer. Each year in the first decade of the 20th century, one out of every 260 Americans purchased a piano (Conniff 1987).

Raw ivory imports rose from 100,195 kg in 1884 to 347,800 kg in 1909 (Kunz 1916; Parker 1979). From 1891 to 1903 the USA imported 1,767,024 kg of tusks, of which Pratt, Read and Company bought 668,580 kg and Comstock, Cheney and Company purchased 497,264 kg. Together they accounted for 66% of all imported ivory (Kunz 1916; Parker 1979; Pratt-Read Company Records n.d.). Interestingly, they differentiated between forest elephants' hard ivory and savannah elephants' soft ivory, something rarely done today in the USA. Both



factories preferred soft ivory because it is less translucent and easier to work. From 1891 to 1903 they bought 742,661 kg of soft ivory but only 423,381 kg of hard ivory (Pratt-Read Company Records, n.d.).

In 1905 the New York office of Comstock, Cheney and Company shipped to Connecticut 14 pieces of mammoth ivory bought in London. The enclosed letter asked: "Have you decided upon the use of mammoth to the extent that we can look out for it in Russia?" (Cheney 1905). Apparently the introduction of mammoth ivory was not a success as it was too hard and too brittle for use as piano keys. However, other substitutes were used to make piano keys. In the late 1870s celluloid keys first appeared; they could simulate the grain of ivory but they were only popular at the cheaper end of the market (Shayt 1993). In the late 1890s companies in London, England, were making annually about 108,000 piano key sets, 75% of which were celluloid and only 25% ivory. Celluloid key sets cost USD 1.75 while ivory ones were USD 2.25, 75 cents more than in the USA (Woods 1897).

In 1910 Pratt, Read and Company began manufacturing ivory piano actions, but never pianos (Pratt-Read Corporation Records, 1839-1990); by 1927 it was making 10,909 actions worth USD 188,939. The sales of finished piano keys (37,092 sets) and roughly-manufactured piano keys (16,008 sets) remained the main products, worth USD 767,331, 77% of the total sales (Pratt-Read and Company Records 1927).

During the 1930s piano key manufacturing declined sharply with the decrease in demand for new pianos consequent to the global Depression and the increasing prevalence of the phonograph, cinema and radio. In 1936 Pratt, Read and Company of Deep River and Comstock, Cheney and Company of Ivoryton merged, retaining the Pratt, Read name. In 1938 the Deep River factory closed, and all commercial activities became consolidated in Ivoryton where there were at least 500 employees, and during busy times up to 800, making key sets and actions, but no longer utilitarian items such as brushes and handles. Waste ivory was ground up and sold as fertilizer (Edith DeForest, a worker in Pratt, Read and Company from 1937 to 1982, pers. comm., May 2007).

During World War II Pratt, Read and Company produced almost no piano keys nor actions but instead built gliders for the war effort, employing an all-time high of more than 3,000 workers (Anon. 1950). After the war the pent-up demand for pianos encouraged the company to return to making piano keys and actions, but it had trouble in attracting younger craftsmen and the average age of the ivory workers who sawed, bleached, matched and processed ivory rose to over 60 (Shayt 1993). The company also complained to their main tusk suppliers, Lepow and Friedlein, that the price of ivory was too high: "At the moment (1949) Lepow indicates that he cannot obtain good, soft ivory from Mombasa at less than USD 3.60 per lb; and I have indicated that the price is too high. I do not believe that we can afford to pay more than USD 3.50 per lb, and only that much in case of necessity" (Seeley 1949). To cut costs, Pratt, Read and Company sold bleached ivory scrap back to Friedlein in Europe; in 1949 this amounted to 4,535 kg (Seeley 1949).

The business of manufacturing ivory keys and actions expanded from 1946 to 1951. Then, Pratt, Read and Company employed about 750 people, including 35 ivory craftsmen, and supplied Steinway, Baldwin and Sohmer, the main manufacturers of pianos in the USA (Don Malcarne, Essex Town Historian, Essex, pers. comm., May, 2007; Anon. 1950). On 25 May 1950, Pratt, Read and Company received a record single shipment of 1,814 kg of raw ivory.

Starting in 1952, Pratt, Read and Company began to suffer a series of setbacks that reduced their ivory business and sales in general. In that year, profits declined sharply because the US Government restricted the company from obtaining certain critical materials, due to the Korean War. It was also around this time that Japanese piano-makers began seriously competing with lower-priced pianos. Demand for pianos was again decreasing because of new forms of entertainment, especially television, and the increasing use by Americans of automobiles to go out in the evenings and at weekends for pleasure.

According to some sources, Pratt, Read and Company stopped buying ivory tusks in the mid-1950s, having switched almost entirely to producing plastic key sets that were much easier and cheaper to make (John Frederick Walker, Ivory Historian and writer, pers. comm., May, 2007; Malcarne, pers. comm., May 2007; Malcarne *et al.* 2002). In the early 1960s Pratt, Read and Company developed a new type of wood and plastic piano key, which became accepted by the main piano manufacturers in the United States (Johnson 1974).

There is controversy over the exact year when the company stopped making ivory piano keys. Peter Comstock, a former president of Pratt, Read and Company, told Don Malcarne that the last year was 1958 (Malcarne, pers. comm., May 2007) and David Shayt, who wrote an article called 'Elephant Under Glass: The Piano Key Bleach House of Deep River, Connecticut', also supports this date. Henry Towers, a production manager of Pratt, Read and Company from 1956 to 1973, believes the year was 1960, but said that the company's craftsmen were still repairing ivory keys when he left in 1973 (Henry Towers, pers. comm., May 2007). Edith DeForest thinks that the company was still making ivory keys in the 1960s (DeForest, pers. comm., May 2007). Susan Foster wrote: "Pratt-Read had successfully converted to plastics and was out of the ivory trade in the 1960s, except for some special orders. Ivory was becoming expensive and hard to find on top of declining piano sales" (Foster 1992).

As for piano actions, in 1958 Pratt, Read and Company transferred that manufacturing to a newly-built factory in South Carolina where labour and other costs were lower, only retaining the factory in Ivoryton for the making of plastic keys and other parts for pianos. In 1986 Pratt, Read and Company sold the Ivoryton factory to piano-makers Sohmer, who closed it down in December 1988. Today the factory makes medical tools, and the Deep River factory has become condominium apartments, called 'The Piano Works'. The two buildings are the remnants of the once-flourishing ivory industry of the Connecticut River Valley that consumed 85% of all the ivory imported into the USA from the early 19th century until World War II (Storms and Malcarne 2001).

Even during the heyday of ivory in the USA, few sculptors used ivory for works of art. It may be that Americans at that time were less interested in the arts than Europeans and Asians; they were more involved in economic and territorial expansion. This was the period of the great railway boom and the development of the steel industry. Insofar as artistic endeavours with ivory are concerned, it really was not until 1973 that these began in earnest, when the US Government banned sperm whale teeth imports under the US Endangered Species Act. Some scrimshanders switched to elephant ivory for carving traditional items that they decorated with their engraving. However, most of these artisans had no formal training, and their workmanship was rather amateurish. Nor did they use much ivory; imports continued to decline from a 1974 to 1979 annual average of 12,590 kg to 5,749 kg per year from 1980 to 1988 (Thomsen 1989).

In 1979 John Hallagan, a consultant working for the National Wildlife Federation in Washington, D.C., wrote a brief survey of the ivory industry in the USA and estimated 1,000 scrimshanders and other artisans were then using ivory in three main areas. He found 300 in New England, the birthplace of scrimshaw, producing a variety of items. In Lahaina, on the Hawaiian island of Maui, scrimshanders were making jewellery, figurines and boxes out of ivory slabs imported from Hong Kong and Japan. In Alaska, scrimshanders carved elephant ivory to look like walrus tusks before etching designs on them.

Hallagan reported 12 raw ivory importers, mostly in New England, California and Seattle; the latter catering to the Alaskan scrimshanders who wanted small tusks weighing between 1 kg and 3 kg. The importers bought the ivory primarily from dealers in Hong Kong, the UK and Belgium; when they imported it directly from Africa, they purchased it in Botswana and South Africa. In the early 1970s tusks from these two countries cost about USD 33/kg, which rose to USD 40/kg in 1977, USD 48/kg in 1978 and USD 63-77/kg in 1979. Hallagan noted that during the 1970s one company in New York City imported from Johannesburg an annual average of 230 kg of raw ivory for making figurines, gavels, bracelets, rings, earrings, chess pieces, dominoes and draughtboard counters. He estimated that the USA consumed 15 tonnes of raw ivory per year in the 1970s, probably less than in the 1960s when fewer restrictions meant it was easier to import (Hallagan 1979).

Although there were 317 businesses and individuals importing USD 7,382,624 worth of ivory in 1978, 16 firms bought 90% of it, and most of these were based in New York, Honolulu, Miami and Seattle. The vast majority of the carved pieces, 82%, came from Hong Kong (Hallagan 1979).

In the mid-1980s TRAFFIC estimated that there were 1,400 people working in ivory, including scrimshanders, artisans who repaired ivory items and other craftsmen (Thomsen 1989). They were still mainly in New England, Alaska and Hawaii. About 1,000 of them worked only part-time, and they used other materials including mammoth tusks, walrus ivory, mastodon tusks, and hippo and warhog teeth. Thomsen organized a survey of the Alaskan market and found that the scrimshanders there were making knife handles, jewellery, figurines, paperknives and belt buckles out of ivory. He concluded that the average ivory craftsman in the USA used less than 5 kg of ivory per year, and calculated that the total annual consumption of raw ivory averaged seven tonnes per year during the mid- and late-1980s, half the amount used in 1979. The USA had a stock of approximately 80 tonnes of ivory in the 1980s, priced at less than USD 100 per kg (Thomsen 1989).

While domestic ivory production was low during the 1980s, imports of worked ivory boomed. In 1986, more than 200 companies brought in 8,497,135 items, worth USD 26 million wholesale, of which 65% was from Hong Kong. Hardly any came from Africa because dealers said that the carving was inferior to that of European and Asian work. The owners of the five largest companies were of Chinese origin and they imported jewellery, figurines and netsukes (Thomsen 1989).

Suddenly the market collapsed. This was because of tremendous publicity against killing elephants for their tusks, which led to the 1989 USA moratorium on all new ivory imports, except for antiques more than 100 years old and sport-hunted trophy tusks. However, from the mid-1990s, with the rise of auction sites on the Internet, people can view ivory items on their personal computers and order whatever they wish. The largest auction site is eBay and because seller/buyer information is confidential, there is no way of telling how much ivory changes hands. In February and March 2002, eBay daily offered for sale an average of 800 ivory objects, 75% of which were netsukes (HSUS 2002). Two years later, between February and May, the number of daily postings had increased to more than 1,000 (Williamson 2004). Many items were from China, but there was also quite a number from American sources. An IFAW survey of eBay during a week in February 2007 found 90 ivory items for sale with only four complying with the law (IFAW 2007). In early June 2007, eBay announced

that after consultations with IFAW the company would ban all international trade in ivory products on their online auction house (Max 2007).

The number of craftsmen continued its decline through the 1990s and Williamson's estimate for 2004 is between 100 and 500 craftsmen working in ivory, mostly part-time (Williamson, pers. comm., May 2007).



Female angel with corner busts in a gilt frame, USA, c.1876



INTRODUCTION TO FIELDWORK

Stiles carried out fieldwork in 2006 in:

- Oahu Island, Hawaii (population 450,000 (Honolulu 390,000)), 16-24 March;
- Los Angeles (population 4.02 million) and contiguous Pasadena (population 141,000), California, 27-31 March, 5-8 April and 21-24 May;
- San Diego, California (population 1.3 million), 2-4 April;
- Las Vegas, Nevada (population 530,000) 9-13 April;
- Dallas, Texas (population 1.2 million), 14-21 April;
- Houston, Texas (population 2 million), 22-30 April;
- Phoenix, Arizona (population 1.4 million), 1-3 May;
- San Francisco, California (population 750,000), 7-15 May;
- Vancouver, Canada (population 600,000), 16-20 May;

Stiles carried out additional fieldwork in 2007 in:

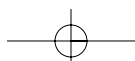
- Los Angeles and San Diego in March-May.

Martin carried out fieldwork in 2006 in:

- New York City, New York (population 8.2 million), 16-31 October, 1-2 November, and 14 December;
- Chicago, Illinois (population 2.8 million), 3-10 November;
- Boston and Cambridge, Massachusetts (populations 591,000 and 103,000), 12-17 November;
- Atlanta, Georgia (population 500,000), 18-20 November;
- Palm Beach, Florida (population 11,000) and West Palm Beach, Florida (population 98,000), 21-27 November;
- Miami, Florida (population 404,000) 28-30 November, 1-4 December;
- Washington, D.C. (population 582,000), 5-13 December;

Martin carried out additional fieldwork in 2007 in:

- New York City, 16 and 25 May;
- Washington, D.C., 18-19 May;
- Essex (population 3,200), Ivoryton (population 2,800) and Deep River (population 4,600), Connecticut, 21-24 May.



SOURCES AND PRICES FOR RAW IVORY IN THE USA, 1990-2007

Ivory craftsmen have no difficulties in obtaining legal supplies of raw ivory, nearly all from old sources. The Internet has revolutionized the business by making it easier to obtain ivory in the United States. Sellers simply use the post. However, craftsmen continue to visit auctions, shops and antique shows held throughout the country in search of ivory. They buy damaged old ivory items at low prices, such as old billiard balls. Three sold for USD 180 in November 2006 on eBay. Restorers buy ivory scraps left over from making gun grips for USD 66/kg. Craftsmen also buy tusks that are hunting trophies, both old and new, which can be illegal if the tusks were not imported prior to July 1975, the time CITES came into effect in the USA. Surprisingly, small tusks of less than 5 kg are sometimes more expensive per kg than the larger ones as they are in greater demand. Most ivory work in the USA is inlaying, repairing and making small parts. This needs little material so most carvers do not want large pieces of raw ivory on which the turnover is slow. This is the reverse of Africa, Asia and Europe, where large tusks are more valuable per kg. In Japan, one of the biggest consumers of ivory, craftsmen dislike tusks of less than 10 kg. Big tusks can produce more and larger items with less waste (Martin and Stiles 2003).

The US ivory craftsmen make no distinction between elephant ivory from the savannah elephants of Africa and the forest elephants of Africa and Asia. The savannah elephant produces a softer ivory that is milkier in colour, while the forest elephant produces a harder ivory that is slightly translucent and more difficult to carve. In Japan, carvers pay higher amounts for hard ivory as it is stronger and finer-grained than soft ivory and better for making *hankos* (name seals or signature seals). In the USA craftsmen buy hard and soft ivory for the same amount.

In 2001 artisans bought wholesale scrap ivory pieces for USD 33-44/kg. By 2006 this ivory was USD 31-92/kg. Informants said that prices of tusks in 2006 were USD 110-150/kg for 0.5 kg tusks and larger damaged tusks, USD 154-220/kg for 3 kg tusks (with most selling for USD 200-220), and USD 154-198/kg for larger tusks of more than 5 kg. A pair of tusks weighing 3.5 kg and 3.9 kg each sold for USD 346/kg on eBay in October 2006 and a pair weighing 13 kg and 14.9 kg each sold on eBay in December 2006 for USD 264/kg (International Ivory Society Newsletter No. 12, 2007).

Since the 1990 CITES ivory ban, the price of ivory wholesale in the USA has increased from USD 132/kg in 1990 to USD 220/kg in 2005 for an average-weight tusk of 3-4 kg (see Table 1).

Table 1
Average wholesale prices for small ivory tusks in the USA for various years*

<i>Year</i>	<i>Weight (kg)</i>	<i>Price/kg in USD</i>	<i>Source</i>
1990	1.3-4.5	110-154	Ivory craftsmen, pers. comm.
2000	3	154-198	Ivory craftsmen, pers. comm.
2002	3	132-198	Humane Society of the US, 2002
2004	4	200	Ivory craftsmen, pers. comm.
2005	3	220	Ivory craftsmen, pers. comm.
2006	3	154-220	Ivory craftsmen, pers. comm.

* See Table 86 for inflation-adjusted prices in 2006 USD

Illegal raw ivory is also smuggled into the USA. For example, in 2001 in Los Angeles whole tusks, along with pieces of worked ivory, were found hidden in a shipment of furniture from Nigeria. The two importers were convicted of ivory smuggling and sentenced to one year and six months in prison respectively (USFWS 2003b). In June 2007 UK Revenue and Customs officers arrested a British man in the UK who had been exporting elephant tusks and whale teeth illegally to the USA over a two-year period (BBC News, 21 June 2007). eBay and other Internet sites have advertised whole tusks and tusk sections with no information about its physical location. An American buyer could inadvertently illegally purchase ivory from outside the USA.

Raw ivory also enters the USA legally, recorded by the USFWS and CITES United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC) databases. An inspection of the details of these imports, however, raises questions about their compliance with CITES and US regulations. Table 2 shows the number of tusks legally imported into the USA between 1995 and June 2007, according to the USFWS Law



Enforcement Management Information System (LEMIS) database. Most of these tusks were trophies from sport-hunted elephants from Africa, but a few were of pre-Convention age.

Table 2
Number of elephant tusks imported into the USA 1995 to June 2007

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
No.	78	18	12	57	61	59	54	44	71	59	64	84	40	701

Source: Analysis of USFWS LEMIS Database, *in litt.*, July 2007, data only available from 1995

Of the 701 tusks, 681 were from African elephants, 13 were from Asian elephants and seven were unspecified. Most African tusks came from Zimbabwe and Botswana followed by South Africa and Tanzania in that order (Williamson 2004; UNEP-WCMC CITES Trade Database, *in litt.*, June 2007).

The UNEP-WCMC database had quite different statistics for tusks entering the USA. Table 3 shows their data for 1990-2005. In addition, some 47 Asian elephant tusks were recorded as imported into the USA between 1990 and 2004.

Table 3
Number of African elephant tusks entering the USA 1990-2005

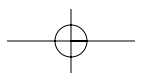
Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
No.	129	213	133	35	120	162	277	212	243	450	213	272	269	315	137	350	3,530

Source: UNEP-WCMC *CITES Trade Database*, *in litt.*, June 2007, UNEP World Conservation Monitoring Centre, Cambridge, UK

The UNEP-WCMC data are presented in various types of tables used for different purposes. Table 3 used the data presented in the Comparative Tabulations database. This output is most commonly used to determine the accuracy of reporting. Reported exports or re-exports from one country can be compared with the imports reported by the receiving country. They are extremely useful for assessing compliance with national and international trade controls, e.g. trade bans and quotas. Comparative Tabulations also show the reported sources, e.g. wild, captive-bred, seized or confiscated, etc., and the purpose of the trade, e.g. commercial, scientific, educational, etc. It is useful to examine the reported purpose and source of the specimens in trade (where this is available), especially with regard to trade in Appendix I species and exports from non-range States. Normally all the data presented in Comparative Tabulations are summed. This means that all quantities traded are added together for all records where the following details are the same - taxon, description of items traded, importer, exporter, country of origin, purpose of transaction, source of material and the year in which the trade occurred. If all the details of transactions (except quantity) are reported identically by both importer and exporter/re-exporter they will appear on the same line of the tabulation. It should be appreciated that trade between two countries, involving the same shipments, frequently fails to show perfect correlation. On many occasions this is due to the source or the purpose being reported differently. This would cause the records of the importer and exporter not to be shown on the same line of the tabulation, but on two separate lines (CITES 2004).

In several cases in the database the exporting country reported exporting many more tusks than the USA reported receiving. For example, in 2000 Botswana reported in one case 166 tusks exported to the USA; 12 were recorded by the USA as imported. This case was reported on the same line, meaning that all information was identical for exporter (Botswana) and importer (USA), except for the number of tusks involved. It was not indicated whether the tusks were transported in one shipment as one transaction, or whether several shipments and transactions were involved. In 2001 a similar occurrence was recorded in which Botswana reported it exported 146 tusks; the USA reported 27 received. Again, the data were reported on the same line. What happened to the missing tusks? Or were these simply cases of erroneous data recording? Neither of these cases were annual totals as other, smaller cases (with no discrepancies) for these years were reported for Botswana exporting tusks to the USA.

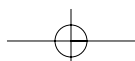
Some cases report only the weight, not the number of tusks, and two cases in 2000 and 2001 from Zimbabwe totalled 5,552 kg, a massive amount. The number of shipments involved in these cases was not recorded, but these are not annual totals as many other cases involving Zimbabwe exporting tusks to the USA were recorded for these years. It is difficult to imagine that this weight of trophy tusks fell within the hunting quota of elephants for Zimbabwe. The source reported in both cases was W (from the wild), with the 2000 case indicating the purpose as T (commercial), clearly not complying with CITES or ESA regulations. The 2001 case cited no purpose code.





Another potentially serious problem is that both the UNEP-WCMC and USFWS LEMIS records often show that tusks from Africa were first sent to a third-party country that then re-exported them to the United States. It is common that sport-hunted trophy tusks taken in one of the approved southern African countries be sent for taxidermy purposes to South Africa, or perhaps Europe, for preparation and mounting, before export by the third country to the USA. However, in six cases between 1991 and 1996 (one involving African ivory and five involving Asian ivory) the exporting third-party country was not a Party to CITES at the time, a violation of CITES and the ESA. Since no such case has been recorded since 1996, it appears that this type of problem has been resolved. There are dozens of cases between 1990 and 2006 in which the third-party exporting country is highly unlikely to have been used for taxidermy purposes. These include several in Central or South America and the Middle East. These instances exclude those cases in which the source was pre-Convention.

In addition, more than 2,400 pieces of raw ivory (not whole tusks) from African and Asian elephants were imported between 1995 and 2005. Between 1995 and 18 July 2007 the USFWS LEMIS database reported that 351 tusks and 15.2 kg of tusks had been refused entry and seized. In addition, 724 raw ivory pieces and 495 gm of raw ivory pieces had been seized. It is possible that the anomalous cases involving apparent inappropriate source and/or purpose codes, suspiciously large quantities, or dubious third-party export countries, were all seized.



IVORY WORKSHOPS AND CRAFTSMEN

It is difficult to ascertain the number of ivory craftsmen practising in the USA as they are widely scattered throughout the country, living in small towns and country areas, not big cities. Their workshops are usually in their homes, making them difficult to find. Most work only part-time with ivory, carving or restoring items, and commonly craft wood, bone, mammoth tusks and hippo teeth as well. The ivory craftsmen do not belong to any guild or association, adding to the difficulty of finding their names. A further snag is that since 1990 the artisans keep a low profile, as due to negative publicity most Americans think working with ivory is morally wrong.

The information gathered on ivory craftsmen came from a variety of sources such as the Internet, collectors, academics and shopkeepers. Three craftsmen were found for extensive interviews in the eastern part of the USA and one was interviewed in Honolulu. The consensus appears to be that in the USA there are a minimum of 120 craftsmen, including restorers, working in ivory at least several weeks a year (excluding those scrimshaw workers who use exclusively fossil whale teeth and fossil walrus tusks). Estimates offered by informants ranged from just less than 100 to just less than 200 artisans working in ivory. A couple of craftsmen believed that there were several hundred and one stated a thousand, but these high numbers may refer to craftsmen working in ivory of species other than elephant. The general feeling was that the number has been decreasing over past years, with older people retiring and fewer young people replacing them.

A company was found in downtown Los Angeles that manufactures Art Deco figurine reproductions of pieces made in the early 1900s by Dimitri Chiparus, Frederic Preiss, Marcel Bouraine, Bruno Zach and others. Originals sell for many tens of thousands of dollars. The copies, like the originals, are made of bronze with ivory heads, arms and legs all mounted on substantial onyx or marble bases. The Internet prices varied from USD 500 to USD 6,800, about 60% of what was advertised on their Web site as the 'gallery price'. The Web site states that they can crate and ship worldwide. The investigator attempted on several occasions to reach the factory by telephone and e-mail to arrange a visit, but after one brief telephone conversation they were unresponsive. An address in Los Angeles was obtained by an Internet search for the business. The investigator visited the address in an industrial area downtown and found only a locked storeroom. This company's factory may not even be located in the USA and it is possible that it is making illegal ivory shipments. The Art Deco reproductions seen in New York City, San Francisco and elsewhere may be manufactured by this company.

Only two definite elephant ivory workshops with one carver apiece were found in Honolulu, Oahu, though, since locally made ivory and bone items were seen in other retail outlets, others probably exist. Both craftsmen were of native Hawaiian ancestry. They were located by finding their wares for sale, one at an open-air art fair and the other at a stall in a department store. The first would not allow the investigator to visit his workshop, nor take photographs of the items. He claimed that his crafting methods and designs were proprietary. His display included a 2-kg mammoth tusk, but this was not for sale. A Chinese stall owner gave the first name of the second craftsman and said that he taught carving to high school students, but she refused to divulge his contact, as she said she had nothing to gain by it. She also refused to allow photographs to be taken of the ivory items for sale. The two craftsmen use negligible amounts of elephant ivory and work more on cow bone, whale teeth, boar tusk or mammoth and fossil walrus ivory. They craft mainly items of traditional Hawaiian culture such as fishhooks and small figurines, but also contemporary jewellery (earrings, pendants, etc.). Oahu had very few elephant ivory items seen and no locally made large ivory items.

Knife-handle makers

The largest group of ivory craftsmen is that making knife handles. It numbers around 50 (Bobby Mann, ivory lecturer, pers. comm., December 2006), and mostly makes handles for hunting knives. An artisan usually buys two ivory handle pieces, already cut to shape, from a specialist company. Depending on their dimensions, these could cost from as little as USD 15 up to USD 310 per pair. The craftsmen then design and decorate the handles; they often scrimshaw designs or carve nude females and wild animals on them. Then they attach the handles to the knives that sell usually for several hundred dollars each. For example, a knife with a 9-cm long blade and a cheetah decoration on the handle was offered in 2006 for USD 500 retail. Some carvers can sell knives for several thousand dollars.

The investigator interviewed extensively a 67-year-old knife-handle maker living in the Washington, D.C., area. In 2000, a highly skilled ivory artisan (who made walking stick handles and knife handles) introduced this man to ivory carving and he began making knife handles and jewellery from whale teeth and ivory at home. In 2006 he made 15 knife handles and five or six walking stick handles, mostly from ivory. On

the knife handles he engraves geometric designs based on Celtic motifs. The knives are small with blades of 10 cm and used mainly by campers. He sells them for USD 300-1,000. For walking sticks, he carves the handle, sometimes into the shape of an eagle's head, and sells them for USD 450-750.

Billiard cue ivory inlay workers

The second largest group of ivory craftsmen inlay billiard-cues. They number from about 30 (Mann pers. comm., 2006) to perhaps 50 (Ron Fromkin, ivory restorer, pers. comm., 25 November 2006). Inlaid cues sell for thousands of dollars and are a profitable business. A major supplier of billiard cue parts in Florida in May 2007 was conducting a sale on their Web site offering ivory ferrules at USD 16.95 each, joint collars for USD 34.95 each, butt caps at USD 74.95 each and inlay slabs for USD 18 each. This company offers to buy tusks and tusk sections for USD 88-275/kg, depending on size and quality, but only if the ivory is in the USA.

Ivory jewellery makers

The third most common group crafting ivory is those making jewellery, about 10. They mostly use scrap ivory (off-cuts) that they buy for USD 31-92/kg from the Internet and other ivory craftsmen. They buy larger chunks of ivory for about USD 110/kg.

Musical instrument craftsmen

Fourth are the musical instrument craftsmen and there are probably less than 10 of them. They make parts for guitars: bridge pins, bridges, strap buttons and nut and saddle blanks. A bridge pin set of six pieces wholesales for USD 95-100, strap buttons are USD 53 while nut and saddle blanks (0.63 cm x 0.83 cm x 1.25 cm) are USD 12 each.

Scrimshanders

While scrimshawing is traditionally done on whale teeth, walrus ivory or bone, an Internet search and information obtained from the International Ivory Society resulted in the identification of eight scrimshanders in the USA who use elephant ivory for scrimshaw work. With elephant ivory they scrimshaw designs on tusk tips, plaques and knife handles. They sell primarily on Web sites, though some also sell in retail outlets. They are located in Rhode Island, Connecticut, North Carolina, Michigan, Wisconsin, Kentucky, Colorado and California. The one in California sells most of his products in Lahaina, Hawaii and on the Internet. One is teaching his daughter to scrimshaw.

Antique restorers

The fifth group comprises antique restorers. These craftsmen spend more time than the others working ivory as a profession. The eastern side of the USA has at least four who all know each another, two in the Florida area and two in Washington, D.C. The two main artisans were interviewed at their homes and in their workshops.

The first antique restorer spends almost all his time restoring ivory items. Born in New York City in 1949, he received a degree in Studio Art and took a job in law enforcement. Woodwork was his hobby. Not until 1990, when a dealer in antiques showed him a Dieppe ivory figurine, was he inspired to try to carve ivory. He spent eight years teaching himself "to carve this most wonderful material: strong, flexible, durable, takes polish well, and outstandingly beautiful". He learned what tools to make, techniques to employ, lathes to use and polishes to apply. After 30 years in law enforcement, he retired in 2004 and was able to take up his ivory hobby full time. He likes to carve complete ivory items, but realizes it is uneconomic. It takes him six months to produce a high quality figurine that he cannot sell at a price high enough to cover his labour. Restoring is more profitable. He visits antique shops and shows and has set up a Web site to publicize himself to potential customers requiring restoration work. Most of his customers are dealers.

This carver was restoring ivory most days in 2006, working from 8am to 5pm seven days a week. He has turned his house garage into a workshop where he works alone. He usually spends one to three weeks restoring an ivory object, such as a figurine or chess piece, and believes he works faster than any of the restorers he knows. He receives broken ivory objects from all over the USA, but not from abroad due to the elaborate paperwork required. He still makes some of his own tools. He has 20 to 25 chisels, and buys his drills of which he has 100. He uses dental composite to fill cracks and coffee, tea, dyes, paints and other substances to colour the ivory. In 2006, he acquired his ivory from the Internet and dealers, paying USD 174-250/kg for 5-25 kg tusks. He also obtained scrap ivory from leftovers from gun grips for USD 75/kg. Also he bought old piano keys for USD 0.50-0.75 each from eBay and uses them to make frames for miniatures. He uses 11 kg of raw and scrap ivory each year at most.

He considers ivory the superior material, but will use substitutes to do some restoration work, especially



when large pieces are needed. For example, he uses giraffe leg bones to repair long objects, such as a swift to hold silk or wool. He has just begun experimenting with camel bone. In the past, some craftsmen carved the knee caps from camels' hind legs into chess pieces, but he has not yet been able to obtain this part. Cow bones are cheap, but he finds them limited in use because they are thin and short. He does not use much mammoth ivory because the colour is often not right for the work required, and he has difficulties in grinding it. He occasionally uses antlers.

His business expanded in 2005 and 2006 despite him increasing his labour charges. For a quick repair, he may charge as low as USD 20 for his labour and material. For polishing a pair of 90-pound (41 kg) tusks he charges USD 2,000. He has never repaired an American-made ivory item as so few of artistic merit remain. This artisan wishes to improve his skills as he is optimistic that his work will continue to be in demand for many years. He very much enjoys his work and his main regret is that his two sons are not interested in following his ivory profession.

The second antique restorer is an immigrant from Eastern Europe. He was born in 1962. As a young boy he carved wood, switching to bone in 1986. He started carving ivory in 1990 upon his arrival in the USA. He first became a jeweller and then, in 1992 an independent artist working with ivory and other materials. He also did restoration work that now has grown to dominate the time he spends on ivory as it is more lucrative. From 2002 to 2006, he was able to produce only one ivory item that was not restoration work: a plaque with a carving of the famous rhino by the artist, Dürer. He worked on it for two months, and decided not to sell it as he would only have been able to receive USD 2-3,000. Although he is considered to be one of the finest ivory carvers in the USA, it is uneconomic for him to carve ivory items. He now spends most of his time restoring antiques made of ivory, silver, wood, mother-of-pearl and other materials.

In 2006 he worked ivory for 20% of his time (he works seven days a week). His workshop is a single storey building a few kilometres from his house in an area of antique shops. He obtains his ivory from the Internet and from auctions, specifically getting old ornamental tusks (about five to seven a year) and broken items, such as old hairbrushes, the latter costing about USD 150/kg. Most of his earnings from ivory probably come from repairing antique figurines and netsukes, mostly Japanese. He buys 20-30 damaged carvings a year from dealers and the Internet; when he has fixed them by, say, replacing a broken limb or face, he sells them at antique shows in Baltimore, Miami and New York City. In late 2006 he bought a Meiji period Japanese figurine of a father and son, 20 cm in height, with a broken hand, for USD 1,000. After repair, he sold it to an antique shop for USD 2,000.

He uses ivory substitutes for some of his repairs. If the item is small he prefers whale teeth as they are dense, possess beautiful colours, are heavy, and take polish well. He also uses mammoth tusks, though he has problems with their colours.

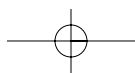
This artist does not see much of a future in the carving of new ivory items as it is simply not economic with the high cost of living in the USA. Cheap items from China and elsewhere are easily available on the Internet, in antique shops and in art shows, so there is little demand for craftsmen in America to produce them. He also believes that there are fewer people interested in buying ivory, and most of the ivory collectors are old men who will be unable to continue their hobbies much longer. On the other hand, he has plenty of work restoring ivory items and other antiques. He has no intention of changing professions.

Netsuke carvers and handgun grip makers

The sixth and seventh most numerous ivory craftsmen are netsuke makers and handgun grip makers, with at least three each. One netsuke maker lives in Maryland, and another, who is Canadian, lives part-time in the United States. Gun grip makers use a duplicating machine to produce the grips or buy slabs off the Internet. These cost from USD 30 for a pair of small, thin handles (about 7.5 cm long and used for Derringers), up to USD 250 for large, thicker ones, (about 11 cm long, such as for a Colt .45). They sell plain finished grips for USD 145-500 wholesale a pair.

Miscellaneous artisans

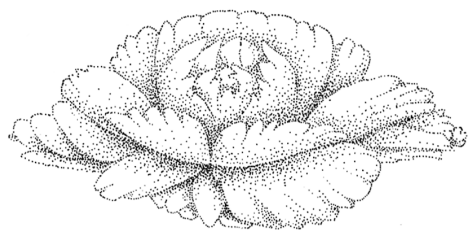
Miscellaneous carvers work on a variety of items; five were located in this survey. A man in Pennsylvania makes spoons. A craftsman in Ohio manufactures ship models. Another makes individual chess pieces to complete sets with missing pieces. There is one man who makes full sets of piano keys all from one tusk for USD 825 a set.





RETAIL OUTLETS AND PRICES FOR WORKED IVORY

Retail outlets selling ivory are widely scattered throughout the country, but mainly in the larger cities on the east and west coasts. Most ivory items are to be found in gift and antique shops. Retail prices of ivory items depend upon several factors: the quality of the workmanship, the physical condition of the object, its age, the quality of ivory, its size, the country where carved, its rarity, customer demand, the location of the retail outlet, and whether the shop is clearing its stock. The locations surveyed are presented geographically, from north to south and east to west.



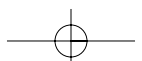
EASTERN USA

BOSTON & CAMBRIDGE

The city of Boston is the capital of Massachusetts. Just opposite Boston on the northern side of the Charles River is the city of Cambridge. There were 758 ivory items for sale in 20 outlets, of which 18 were in Boston and two in Cambridge (see Table 4). Boston had 659 ivory items with most in antique shops. There were also two gift shops, two jewellery shops and one piano shop with ivory. In Cambridge, known for Harvard University and the Massachusetts Institute of Technology (MIT), 99 ivory items were counted in its two markets (see Table 4).

Table 4
Types of retail outlets and number of items surveyed in Boston & Cambridge, November 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique shop	13	65	620	48
Antique market	2	10	99	50
Gift shop	2	10	22	11
Jewellery shop	2	10	16	8
Piano shop	1	5	1	1
<u>Total</u>	<u>20</u>		<u>758</u>	<u>38</u>



Netsukes (36%) and figurines (21%) were the main items on sale in Boston and Cambridge as shown in Table 5. Of the 709 items identified by place of origin, 323 or 46% were from China, 205 or 29% from Japan, 94 or 13% from Europe, 80 or 11% from India, and 7 (1%) from Africa (see Table 6).

Table 5

Ivory items seen for retail sale in Boston & Cambridge, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Netsuke	279	36
Figurine	160	21
Chess piece	58	7
Jewellery	57	7
(Bangle	29	4)
(Brooch	14	2)
(Pendant	8	1)
(Necklace	6	1)
Box	15	2
Miniature painting	10	1
Figure	9	1
Silver teapot with ivory	8	1
Brush	6	1
Cup	6	1
Cutlery	6	1
Name seal	6	1
Paperknife	5	1
Vase	5	1
Snuff bottle	4	3
Misc.	135	17
<u>Total</u>	<u>778</u>	<u>100</u>

Table 6

Types of ivory items made in countries/regions seen for sale in Boston & Cambridge, November 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
China	Netsuke	144	45
	Figurine	115	36
	Box	10	3
	Bangle	7	2
	Pendant, vase	5 each	4
	Name seal, plaque, snuff bottle	4 each	3
	Chess set, container, urn	2 each	3
	Misc.	13	
	<u>Sub-total</u>	<u>323</u>	
	Japan	Netsuke	135
Figurine		45	22
Napkin ring		9	4
Game		4	2
Paperknife, tea container		2	2
Misc.		8	4
<u>Sub-total</u>		<u>205</u>	
Europe	Brooch	14	15
	Miniature painting	10	11

Table 6 continued

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
	Cutlery	8	9
	Box, necklace	5 each	11
	Earrings pair, figurine, paperknife	3 each	9
	Parasol with ivory handle, picture frame	2 each	4
	Misc.	39	41
	<u>Sub-total</u>	<u>94</u>	
India	Chess piece	58	73
	Bangle	22	27
	<u>Sub-total</u>	<u>80</u>	
Africa	Bust	6	86
	Carved tusk	1	14
	<u>Sub-total</u>	<u>7</u>	
	<u>Grand total</u>	<u>709</u>	

Recently-made (post-1989) ivory items in Boston & Cambridge

At least 29 of the ivory objects seen were made after 1989 (see Table 7). All came, as expected, from either Hong Kong or China. The majority of them were found in two shops in Boston's China Town. The owner of one stated it was illegal to import ivory after 1989. Most of these new items were figurines, followed by name seals, and snuff bottles.

Table 7

Recently-made (post-1989) ivory items in Boston & Cambridge, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price in USD*</i>
Figurine	17	7-9	Hong Kong, China	280-298
Set of 7 lucky gods	1	9	Hong Kong, China	-
Set of 2 figurines	1	8	Africa	125
Name seal	4	6	China	125
Snuff bottle	3	8	China	-
Necklace	1	medium	China	-
Bangle	1	1	China	52
Bangle	1	5	China	68
<u>Total no. of items</u>	<u>29</u>			

* Some prices could not be obtained as the vendors were suspicious

Antique shops in Boston

There were 13 antique shops selling 620 items, which were 82% of all items seen in Boston and Cambridge. All but three of the shops were on Charles Street, an area famous for the city's best antiques. Some of the dealers lamented that the antique business used to be much better and that some shops had closed down. They suggested that this is because the Internet has reduced the number of customers who come to these shops, the young people prefer to buy modern furniture, and the older people are not so interested in shopping for antiques as they already have what they want. The worst time of the year for business is from December to February when people prefer not to go out in the snow. One dealer in Charles Street said that after 20 years in the profession, his antique business was worse now than ever; during the winter season he may have to wait up to two weeks for a single sale. He therefore has great difficulty in paying the rent of USD 2,200 a month for his average-size shop.

The antique shop with the most ivory (219 pieces) was on Newbury Street. Just over half were Japanese

netsukes varying in price from USD 195-500. There were just two expensive items: a Chinese-made barge and two chess sets, one of which had elaborately carved 9-cm tall pieces made in China around 1900 for USD 12,500 – the most expensive ivory item seen in Boston and Cambridge.

The shop with the second largest number of ivory items was on Charles Street and displayed 165 ivory objects. Of these, 80% were Chinese netsukes priced at USD 50-375 with a 20% discount for cash. Most of the netsukes had been carved over the past 30 years but as the style has remained the same, whether they were post- or pre-1989 was impossible to tell. Their carving varied from mediocre to good. There were no expensive items for sale, with the highest price being USD 1,600 for a 10-cm Japanese figurine.

Boston had no antique markets selling ivory and the shops did not sell expensive pieces. The most expensive item was a 15 x 5-cm penis made during the Japanese Meiji period for USD 5,000. The owner said it had been in the USA since the 1960s.

Antique markets in Cambridge

There were no antique shops in Cambridge. Two antique markets were the only outlets with ivory (see Table 8). One, the Cambridge Antique Market, was on Msgr. O'Brien Highway and the other was on Cambridge Street. Each market was considered as one outlet as the small booths were often inseparable and without names; there were no vendors at the booths, instead a couple of people manned the whole building. Both markets displayed a great range of mostly poor quality and low-priced 'antiques', including dolls, telephones, brushes, clothes and furniture. Most items were made in the 20th century.

Table 8

Number of ivory items seen in Cambridge markets, November 2006

<i>Name of market</i>	<i>No. of booths</i>	<i>No. of items</i>
Cambridge Antique Market	c.150	81
Antiques on Cambridge Street	c.100	18
<u>Total</u>	<u>c.250</u>	<u>98</u>

Cambridge Antique Market

The most common ivory item seen here was 58 Indian 4-cm high chess pieces that were being sold at USD 15 each. These were the cheapest items seen in Boston and Cambridge. The remaining 23 items were mostly jewellery made in China, India and Japan in that order, and priced quite cheaply. The most expensive item was a pair of African busts 18-cm tall for USD 680 after a 20% discount.

Antiques on Cambridge Street

This smaller market had only 18 ivory items. The most expensive was a French fan made around 1900 for USD 683 after a 35% discount.

Gift shops in Boston

The two gift shops were in China Town. Of the 22 items, all small human figurines, most were probably made after 1989 in either Hong Kong or China, according to the shop managers.

Jewellery shops in Boston

The two jewellery shops had just 16 ivory items. The larger offered 14 Indian bangles with modern silver clasps. They were plain and made from the 1940s to the 1960s. They varied in width from 1 cm for USD 135 to 5 cm for USD 900. The shop owner had imported them from a dealer in New Delhi.

The second shop sold jewellery and expensive silver items. Two of the latter had small parts made of ivory: a 30-cm urn with an ivory spigot made in England in 1791 for USD 13,500, and a serving spoon with an ivory handle also made in England.

Piano shops in Boston

One piano shop was seen and of the 25 or more pianos for sale only one had ivory keys. A salesman said that professional pianists today prefer plastic keys because they are more consistent, easier to clean, never crack, do not change colour and do not expand when heated (Dustin Deluke, M. Steinert and Sons, pers. comm., 13 November 2006). The one piano with ivory was a Steinway, Model C, (2.1 m x 0.6 m) made in Queens, New York State in

1916 and priced at USD 68,500. This was the second most expensive item with ivory in Boston and Cambridge, the first being an Erard piano with ivory keys in an antique shop on Charles Street that was made in France in 1856 with elaborate carvings and paintings.

Retail prices in Boston & Cambridge

Table 9 gives retail prices for some of the more common ivory items seen in Boston and Cambridge.

Table 9

Retail prices for ivory items seen in Boston & Cambridge, November 2006

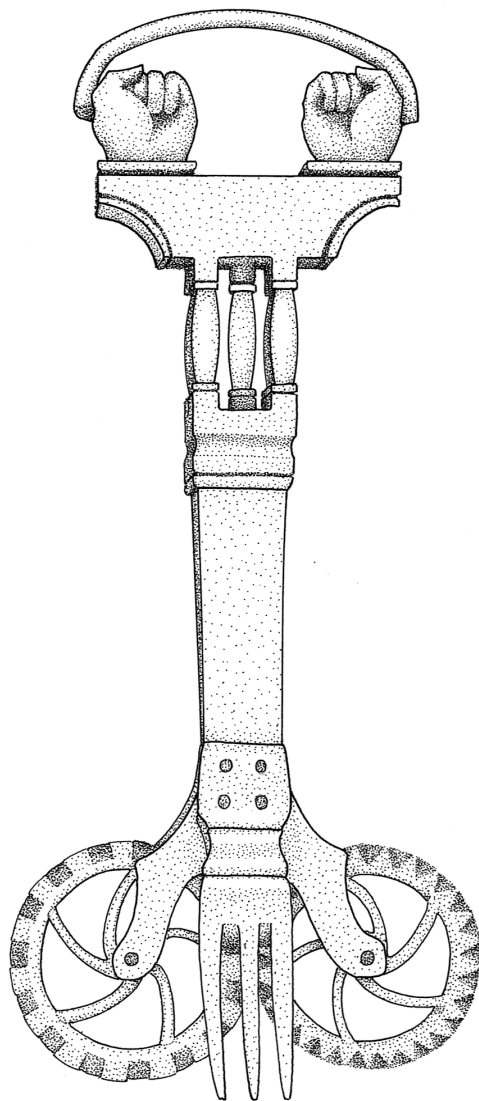
<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	India	32-135
	2	China	72-275
	5-7	India	360-900
Bracelet		China	65
Brooch	5	Europe	150-195
Pendant	7	China	38-48
FIGURINES			
Human	3-4	China	35-125
	5-10	Europe	75-500
		Japan	75-1,600
		China/Hong Kong	280-298
	11-20	Africa	340
Netsuke	6	Japan	520-950
		China	40-300
		Japan	195-500
MISC.			
Box	5-6	China	55-350
Brush	6	Europe	55
Cup	6	China	60
Fan	18	France	683
Magnifying glass handle	10	Japan	395
Name seal	10	China	125
		Europe	285
Paperknife	15	Europe	85-120
Picture frame	38	Europe	95
		Japan	150
Walking stick handle	9	Japan	185

Prices of ivory items were quite low, ranging from USD 15 for the Indian chess pieces to USD 12,500 for the full Chinese chess set. The most expensive items were those with ivory parts, notably the Erard and Steinway pianos.



NEW YORK CITY

New York City in New York State is the financial capital of the world and the cultural hub of the country, attracting huge numbers of both local and foreign tourists. It is home to many of the greatest collectors of art, and has far more antique shops than any other city in the USA; many of these antique shops have ivory items for sale. A total of 124 outlets selling at least 11,376 ivory items was found in the city. There were probably a few more shops with ivory for sale, but not many. Almost all these shops were in the borough of Manhattan: from 100th Street southwards to China Town, and from the west of the island (Hudson River) to the East side (East River). Types of outlets were gift shops, antique shops, antique markets/centres with stalls, piano shops and a few miscellaneous outlets (see Table 10).



Pastry jaggging wheel, USA, 18th century

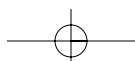




Table 10

Types of retail outlets and number of ivory items surveyed in New York City, October/November 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Gift shop	22	18	4,973	226
Antique shop	38	31	4,743	125
Antique market	57	46	1,251	21
Piano shop	5	4	30	6
Misc. outlet	2	2	379	190
<u>Total</u>	<u>124</u>	<u>101</u>	<u>11,376</u>	<u>90</u>

The most common items for sale were netsukes: 6,460 (58%) and figurines: 4,365 (39%) (see Table 11). There were 11,140 items that could be identified by place of origin, and of these 5,981 (54%) were made in Japan, 4,496 (40%) were from China, 608 (5%) were from Europe, 35 (<1%) were Indian and 20 (<1%) were African. Table 12 gives details on the types of items made in each country or region.

Table 11

Ivory items seen for retail sale in New York City, October/November 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Netsuke	6,460	58
Figurine	4,365	39
Jewellery	47	<1
(Bangle	21)	
(Necklace	11)	
(Bracelet	6)	
(Earrings, pair	5)	
(Pendant	4)	
Piano with ivory keys	30	
Box	27	
Paperknife	24	
Picture frame	23	
Walking stick handle	22	
Fan	18	
Furniture inlay	8	
Vase	8	
Carved tusk	7	
Inro (Japanese container)	6	
Teapot parts	6	
Canton magic ball	5	
Magnifying glass handle	5	
Tankard	5	
Brush container	4	
Brush	4	
Chinese landscape	4	
Rose	4	
Tea caddy	4	
Misc.	290	3
<u>Total</u>	<u>11,376</u>	<u>100</u>

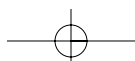


Table 12

Types of ivory items made in countries/regions seen for sale in New York City, October/November 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
Japan	Netsuke	4,632	77
	Figurine	1,333	22
	Inro	6	
	Dagger sheath, walking stick handle, vase, box, misc.	2 each	
	<u>Sub-total</u>	<u>5,981</u>	
China	Figurine	2,571	57
	Netsuke	1,828	41
	Box	15	
	Fan	11	
	Necklace	10	
	Vase, carved tusk, Canton magic ball	5 each	
	Chinese landscape, brush container, bangle	4 each	
	Name seal, scroll weight, earrings (pair), ornament	3 each	
	Pen, lamp, snuff bottle, cricket cage, bracelet	2 each	
	Misc.	12	
	<u>Sub-total</u>	<u>4,496</u>	
Europe	Figurine	444	73
	Paperknife	24	4
	Picture frame	23	4
	Walking stick handle	20	3
	Furniture inlay	8	1
	Fan	7	1
	Teapot parts	6	1
	Tankard, magnifying glass handle	5 each	1
	Tea caddy, box, brush, rose	4 each	1
	Card case, riding crop, pendant, mirror, miniature ornament	3 each	
	Fork, napkin ring, earrings (pair), pepper mill, candlestick, piano with ivory keys	2 each	
	Misc.	30	5
	<u>Sub-total</u>	<u>608</u>	
India	Bangle	13	37
	Figurine	8	23
	Box	6	17
	Misc.	8	23
	<u>Sub-total</u>	<u>35</u>	
Africa	Figurine	9	45
	Bangle	4	20
	Bracelet	3	15
	Spoon, misc.	2 each	20
	<u>Sub-total</u>	<u>20</u>	
	<u>Grand total</u>	<u>11,140</u>	

Recently-made (post-1989) ivory items in New York City

All the 11,376 ivory items seen were examined for their age. About 10% were recently made or post-1989 (meaning after the 1989 US ivory import/export ban). It is impossible to be certain that an ivory item is recently made. However, the style, condition, price, and information from the vendor can help determine the age of a genuine item, whether old or recently made.

Most shopkeepers selling ivory knew of the international ban on trading ivory. Some were confused about the year this came into effect and whether it applied to domestic sales. Some owners and managers of shops admitted having pieces made after 1989, despite the illegality of importing such items. They may not have smuggled them into the country, but could have bought them, as elsewhere in the USA, if the ivory were imported in compliance with CITES and the ESA. Within New York vendors may sell and customers can buy such items legally.

All but two of the 1,153 items that were recently made came from China, although possibly a few could have been made in Thailand or elsewhere in South East Asia (see Table 13). Traders in China make mostly small items, such as netsukes, figurines and jewellery, that can be more easily transported across international boundaries (Martin 2006). Of these items seen in New York City, 56% were netsukes, almost all being only 5-6 cm in size. Most were cheap in price, which is consistent with prices in China for similar recently-made items. These and small Chinese figurines were generally the cheapest ivory carvings on sale in the city.

Table 13

Recently-made (post-1989) ivory items seen in New York City, October/November 2006

<i>Item</i>	<i>No. of items</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price in USD*</i>
Netsuke	644	5	China	30-500
Misc. figurine	462	3-20	China	various
Erotic figurine	12	6	China	150
Necklace, small beads	9	1 cm beads	China	-
Erotic couple	8	5	China	-
Animal figurine	3	5	China	135
Bangle	3	1 cm width	China	100
Necklace, tiny beads	3	0.5 cm beads	China	30
Elephant bridge	3	-	China	-
Buddha figurine	2	3	China	50
Bracelet	1	-	China	-
Fan	1	8	China	-
Female bust	1	-	Africa	-
Tusks, pair polished	1	-	Africa	-
<u>Total no. of items</u>	<u>1,153</u>			

* Some prices could not be obtained as the vendors were suspicious

Antique markets in New York City

The total number of items at three regular markets plus an annual dealers show and a flea market was 1,251; these were in 57 stalls or outlets. The three regular antique markets, called antique 'centers', were in Manhattan and were selling 1,237 ivory items (see Table 14). They were open daily with dozens of stalls selling antiques; a few of them sell ivory, mostly older items. Some irregular markets and shows also display antiques for sale, sometimes ivory pieces. During the investigator's visit in October the antique dealers had their annual show and a weekend flea market was open. Ivory items ranged from valuable at the dealers show to cheap at the flea market.

Table 14

Number of retail outlets and ivory items seen in New York City markets, October/November 2006

<i>Name of market</i>	<i>No. of outlets</i>	<i>No. with ivory</i>	<i>No. of items</i>
Manhattan Arts and Antique Center	80	23	965
The Show Place Antique Center	182	22	262
International Fine Art and Antique Dealers Show	?	6	13
Center 44	70	5	10
Flea market on Broadway, Lower Manhattan	36	1	1
<u>Total</u>	<u>1,251</u>	<u>57</u>	

Manhattan Arts and Antique Center

This antique market is a large, three-storey building on the fashionable east side of 1050 Second Avenue at 55th Street. It is the largest antique centre in the city and claims to be the biggest in the USA. All types of antiques were for sale, from furniture to ornaments, originating from all over the world. Nearly all the goods were genuine antiques. Vendors, as well as the usual Americans of European origin, were from eastern Asia selling items from their countries of origin. It was a reasonably high quality market with some very good antiques. A minority of stalls offered ivory: 23 of them displayed 965 items from Japan, China, Europe and India that included just one piece of jewellery, a bangle. The most expensive and best carved items were a Japanese box 22-cm high that was made around 1880 priced at USD 65,000, and several outstanding human figurines of 15 cm made in the 19th century in Paris and Dieppe at USD 3,000-6,000. Most customers are collectors, not tourists.

The Show Place Antique Center

This market is on 40 West 25th Street in Lower Manhattan, an area that does not attract so many tourists or collectors. It is also a three-storey building but sells cheaper-priced antiques of various origins. Of the 182 stalls, 22 were displaying for sale 262 ivory items. Unusually, two outlets were selling ivory religious figurines from the Philippines. The Filipino vendors explained that many people from the Philippines had recently given up Roman Catholicism to become born-again Christians or taken up another religion. No longer requiring Roman Catholic religious statues in their homes, some have sold them. The larger booth displayed 15 such ivory figurines. Some 15 cm-high, 18th-century examples were offered for USD 1,700 while others, 10 cm-high, were selling for USD 800. Another 39 wooden religious statues, some as tall as 150 cm, had hands and arms made of ivory; most of these were carved in the 1950s and 1960s, some from the town of Cebu; they were priced on average at USD 500. Also displayed were six small human heads (probably of Jesus Christ) and five crucifixes. The smaller booth offered four wooden religious figurines allegedly from the 18th century that were 17 cm in height with hands and feet of ivory for USD 550. There were seven similar ones that had been carved in various parts of the Philippines in the 1950s selling for USD 450.

International Fine Art and Antique Dealers Show

This show is organized once a year usually in October in a high-ceilinged large hall within the Armory building on 67th Street on exclusive Park Avenue. The show lasts about a week and is the most famous in the USA for antique sales. Vendors come from all over the USA and Europe to sell expensive items. The quality of the antiques was superb. However, only six booths were selling ivory and these offered 13 items. Foreign dealers complained that there was so much bureaucracy to move ivory items - even antiques - in and out of the USA that they prefer not to do so. One British company offered for sale a 1780 silver teapot with ivory parts for USD 8,200 and a spoon with an ivory handle. A second British company that also has a permanent antique shop in the city displayed a Japanese Meiji period crayfish, 28-cm long with moveable parts, for USD 37,050. This booth also displayed for the same price a pair of Rajasthan human figurines with stained decorations 30 and 35-cm tall and made in the 18th century. There were two early 20th-century, 14-cm spoons from the Democratic Republic of Congo (DRC), priced at USD 1,800 each. There was a Dinka bracelet, 19th-century, for USD 900. There was a pair of ivory bangles from Sumba in Indonesia, 19th-century, for USD 2,500. The other antiques were an Anglo-Indian Tempietto (chapel), two Indian boxes, a tea urn with ivory spout, and a Cartier necklace, all highly priced.



Center 44

This large antique showroom on 45th Street and Second Avenue had 70 booths. Only five had ivory items totalling 10 pieces. Ivory carvings made in South America are very rarely seen but this showroom had one: a 25-cm tall male figure with ivory head and hands made c.1800 selling for USD 2,800. There were two ivory busts from the DRC, c.1900, 18-cm high, for USD 1,250 each. A 20-cm figurine of a young girl from Africa was offered for USD 950. Four wooden tea caddies with inlaid ivory around the keyhole cost about USD 1,100 each. Also for sale were a Japanese wooden box with an ivory figurine on top and a French Art Deco desk writing-set in mahogany with ivory inlay.

Flea Market on Broadway, Lower Manhattan

This flea market, open in the weekends on Broadway and 25th Street, was in a car-park-like area and sold bric-a-brac on tables from 26 stalls. A Chinese brush holder was the only ivory for sale. The Chinese vendor said he had sold more ivory items in the past.

Gift shops in New York City

The city had 22 gift shops selling ivory. These shops had 4,973 ivory items for sale, more than any other type of outlet, but surprisingly very few were jewellery. Several sold primarily furniture and ornaments and most were in the middle of Manhattan on the east side along Fifth, Madison and Lexington Avenues. They were usually in old buildings, several storeys high and usually congested. They sell pseudo-European reproduction furniture - much of it heavily gilded - modern human full-size statues, glass or China vases and ornaments, and (of relevance to this study), Art Deco style human statuettes almost all with ivory faces and hands, Chinese ivory figurines or netsukes, and occasionally large ivory pagodas or scenic pieces with trees. Some of the small ivory ornaments were displayed in the shop windows. All these shops displayed signs advertising 'major sale' or 'huge discount' with reasons (mostly legitimate) such as 'going out of business', 'building coming down', 'inventory reduction', 'lease coming to an end' or 'major renovations taking place'. Prices are usually reduced by 50-90% in order to attract customers: it does not actually mean the items are sold at a loss.

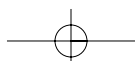
The gift shop with the most ivory items (1,455) was on Fifth Avenue, a street famous world-wide for its expensive and fashionable retail outlets. Of these, 1,400 were Japanese netsukes, including some from the 18th century, and erotic Japanese netsukes from the 19th century. Prices varied from USD 200 to USD 1,200 after discounts of up to 90%. The owner explained he was prepared to give such high discounts because he needed to sell his stock to pay for shop renovations. His customers were mainly Americans, but one Japanese in 2006 bought 20 netsukes from him. In the recent past, he displayed some of his works of art in the Plaza Hotel, one of the more famous in North America. He claimed that his grandfather had built up the netsuke collection and his father had continued it. Some Chinese and Japanese figures were also on display.

The gift shop with the second largest collection of ivory objects was in Lower Manhattan. It was a Chinese-owned and managed gift shop with Chinese goods, including 850 recently-made ivory items. The most numerous were 339 figurines made either in Hong Kong or mainland China. There were 304 netsukes that the salesperson said were crafted five to 10 years ago. That would mean they had been smuggled into the USA, but not necessarily by the shop owner. The poorer quality netsukes could be bought for as little as USD 35. The better quality ones were available for USD 100-150 with the average prices ranging from USD 150-200. The salesman said it was primarily a retail shop but also sold many goods wholesale.

The gift shop with the third largest number of ivory items (610) was on Fifth Avenue. Almost two-thirds, 400, were netsukes, discounted as usual. One with a label marked at USD 3,200 could be obtained for USD 150. Most were not high quality Japanese works, but Chinese imitations probably made in the last 15 to 30 years. Perhaps half were crudely carved pieces, including erotic couples.

Antique shops in New York City

There were 4,743 ivory items in the 38 antique shops found in Manhattan. The shop with the most was in mid-Manhattan selling 2,402 pieces. This shop had sold ivory for more than 50 years, but the building was to be pulled down in 2007 so the owner was selling as fast as he could to end the business. About 2,000 were Japanese-carved netsukes from the Meiji period (1868-1910). No Chinese-made ones were for sale as they are not true antiques. In fact he said he had not bought Chinese-made ivory items for 10 years. The owner said he was the largest retail dealer for ivory netsukes in the USA. Poorer quality ones had a marked price of USD 1,800-2,100 and the good quality ones, some of which were intricately carved, were marked at around USD 2,700; the owner offered a 65% discount for all of them. The stock included about 390 Oriental human or animal figurines and large scenic pieces or pagodas of which 75% were Chinese and 25% were Japanese. Of the Japanese carvings, some were erotic figurines dating from the 1950s-1970s while many of the others were from the Meiji period. One of the most





outstanding was a set of 12 zodiac figurines, 6-cm tall, for USD 10,800 after bargaining. The most expensive Chinese item was a 19th-century pagoda 120-cm tall, with humans in and around it. It came from a Chinese resident in New York City in the 1950s. The shop owner said that the National Palace Museum in Taipei had offered him USD 300,000 for it in 1994. There were 12 Art Deco human figures, 90-120-cm tall, believed to have been made in France in the 1920s and 1930s by the famous Romanian/French sculptor Dimitri Chiparus (1886-1947). Only a few were entirely made of ivory, most being made of bronze with the hands, feet and faces carved from ivory. They were marked at USD 30,000, but the shop owner could offer only a 20% discount as they were quite easy to sell. Many of the items in the shop came from estate sales (usually after the death of the estate owner) - specifically mentioned for these was Palm Beach in Florida. His customers are 80-85% American, the others being Europeans, especially dealers from Switzerland, Germany and the Netherlands. During the investigator's third visit to this outlet, the shop owner was expecting dealers from Osaka and Tokyo on account of the shop's imminent closure.

The antique shop with the second most ivory items for sale displayed 1,364 pieces. This shop, also in mid-Manhattan, sells very high quality ivory antiques and produces full colour catalogues to illustrate them. There were 662 Japanese figurines and larger figures from the Meiji period, 326 Chinese figurines mostly of the 19th century, 244 Japanese netsukes from the Meiji period, and 51 European figurines mostly from the 19th century. Among the more unusual items was a 60 x 60-cm tall tree made from an old piece of wood with 38 ivory 5-cm human figurines attached to the branches that came from the late Edo period (1603-1867), offered for USD 140,000. A Japanese cabinet, 23-cm high, from the Meiji period was offered for USD 35,000, and a pair of 19th-century French human figurines for USD 30,000.

Another antique shop sold mostly Indian and Sri Lankan pieces. One item was a rare 23-cm prince made in Sri Lanka around 1856. The ivory was stained in many colours (polychrome). As it is very rare these days to purchase a piece carved in Sri Lanka, it was priced at USD 35,000.

Piano shops in New York City

Most of these shops were on 57th and 58th Streets, just west of Fifth Avenue. Five were selling a total of 30 pianos with ivory keys. All were grand pianos and none was new. The USA stopped making ivory keys in the 1950s and 1960s. In probably the biggest piano shop called Steinways, a multi-storey building on 109 West 57th Street, five of the 50 pianos on offer had ivory keys. The oldest was manufactured in 1880, a Steinway, and the newest - in another shop - was another Steinway, Model B, made in 1956. The latter was a large ebony piano 2 m long, made in New York State and selling at USD 59,500. Prices for pianos with ivory keys ranged from USD 22,900, a Kanabi made in New York State in 1941, to USD 185,000, which was for a Steinway manufactured in New York State in 1895 and made from rosewood with wood inlay.

Miscellaneous shops in New York City

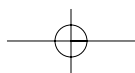
Ivory items were found for sale in an electronics shop. This shop was on Seventh Avenue and 51st Street. The manager was anxious to sell his old stocks of ivory items - 366 pieces - in order to create space for his newer business in electronics. He was offering discounts of up to 75% on his ivory and was selling some wholesale to dealers. Most of his items were pre-1989 Chinese-made netsukes and figurines. One of the salesmen said a few items had come from South Africa. In the main window were 8-cm figurines from China that were marked at only USD 49.99. This shop was found by chance.

Also found by chance on Broadway in Lower Manhattan was a shop selling billiard tables, cues and balls, an active business since 1923. They had for sale 13 billiard cues with ivory inlay, all crafted by Americans within the last five years. The cues had ivory mixed with other inlay materials, such as silver, gold, malachite, ebony, mother-of-pearl, abalone, sting ray skin and snake skin. Prices ranged from USD 1,000-6,500 with most ivory inlaid ones selling for USD 4,000-5,000 each.

Retail prices in New York City

The most expensive ivory items were the large carvings, such as pagodas and scenic pieces from China. Some of the most intricate carvings were also very expensive, such as the crayfish with moveable parts. Rare items fetched very high prices too, including the Sri Lankan figurine of a prince. The cheapest items were recently-made small Chinese objects, such as netsukes and small figurines, and there was a tiny amount of very cheap Chinese ivory jewellery. The cheapest, at USD 30, were 4-cm crudely carved figurines, and a bangle.

Some large wooden items, such as furniture and pianos, had ivory inlay, and were extremely expensive. The billiard cues with ivory inlay were also expensive. Prices for bronze statues with ivory faces and hands varied depending if they were original Art Deco pieces or copies. Quite common and of varying prices were



silver objects with small ivory parts, such as teapots with ivory handles. Table 15 shows the prices for various items seen in New York City.

Table 15

Retail prices for ivory items seen in New York City, October/November 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	2	China	30-100
		India	500
	5	China	30
		Africa	500
		Indonesia	1,250
Bracelet		China	65-225
		Central Africa	330
		Sudan	900
Necklace, small beads		China	50-280
FIGURINES			
	5-10	China	50-280
		Philippines	800
		Japan	2,200
	11-20	China	400-1,100
		Africa	950-1,250
		Japan	3,000-27,500
		France	2,200-35,000
	21-30	China	780-2,600
		France	2,500
	Netsuke	31-40	China
4-6		China	30-500
		Japan	600-3,600
TUSKS			
Carved	90	China	80,000
Polished, 8 kg		Africa	3,685
MISC.			
Box	20	SE Asia	250
	20-60	India	2,750-12,500
	20	Japan	65,000
Canton magic ball	10	China	4,000
Card case	10	China	6,500
Cricket cage	9	China	1,400-2,500
Fan	25	UK	1,895
Magnifying glass handle	10-33	UK	150-895
Napkin ring	6	UK	18
Pagoda	62-120	China	45,000-150,000
Paperknife	20	Europe	75-795
	40	UK	995-2,500
Scenic piece	60-90	China	20,000-140,000
Walking stick handle	10	Europe	900-1,500
		Japan	600-9,200

WASHINGTON, D.C. AREA

The area of Washington, District of Columbia, as surveyed for this report, consisted of the city of Washington, D.C. (including Georgetown), the town of Kensington in Maryland and the city of Alexandria in Virginia. Washington, D.C. is the nation's capital but not one of the largest cities in the United States. Its economy is based upon the activities of the Federal Government, non-government organizations, and tourism. The Washington, D.C. area is not a place for buying antiques and had rather low quality items and very little ivory for sale, new or old. Only 25 retail outlets were counted in the whole area with ivory items totalling merely 236 pieces. Not one outlet had more than 45 items. Table 16 gives the types of outlets with ivory.

Table 16

Types of retail outlets and number of ivory items surveyed in the Washington, D.C. area, December 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique shop	12	48	96	8
Gift shop	8	32	96	12
Jewellery shop	4	16	43	11
Flea market	1	4	1	1
<u>Total</u>	<u>25</u>	<u>100</u>	<u>236</u>	<u>9</u>

The most numerous items for sale were figurines (27%), jewellery (26%) netsukes (6%) and boxes (6%) as seen in Table 17. The Washington, D.C. area had the highest percentage of ivory jewellery of the places surveyed in the eastern USA. There were 156 ivory items that could be identified by region or country: 38% were made in Japan, 34% in Europe, 24% in China, 3% in India, and less than 1% in Africa (see Table 18).

Table 17

Ivory items seen for retail sale in the Washington, D.C. area, December 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Figurine	64	27
Jewellery	62	26
(Necklace)	21	9)
(Brooch)	13	6)
(Bangle)	11	5)
(Earrings, pair)	6	3)
(Bracelet)	5	2)
(Pendant)	5	2)
Hair ornament	1	<1
Netsuke	15	6
Box	14	6
Ball	12	5
Cigarette holder	8	3
Napkin ring	8	3
Miniature	7	3
Walking stick handle	6	3
Glove stretcher	3	1
Magnifying glass handle	3	1
Opera glasses	3	1
Misc.	31	13
<u>Total</u>	<u>236</u>	

Table 18

Types of ivory items made in countries/regions seen for sale in the Washington, D.C. area, December 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
Japan	Figurine	27	46
	Netsuke	15	25
	Balls	12	20
	Misc.	5	8
	<u>Sub-total</u>	<u>59</u>	
Europe	Box	8	15
	Miniature	7	13
	Walking stick handle	4	8
	Glove stretcher, magnifying glass handle, opera glasses, paperknife	3 each	23
	Cutlery set, figurine, pendant	2 each	11
	Misc.	16	30
	<u>Sub-total</u>	<u>53</u>	
China	Figurine	22	58
	Necklace	9	24
	Misc.	7	18
	<u>Sub-total</u>	<u>38</u>	
India	Figurine	3	60
	Misc.	2	40
	<u>Sub-total</u>	<u>5</u>	
Africa	Tusk, carved	1	100
	<u>Sub-total</u>	<u>1</u>	
	<u>Grand total</u>	<u>156</u>	

Recently-made (post-1989) ivory items in the Washington, D.C. area

At least two pieces of jewellery were most likely made after 1989. Both were crafted in China and were inexpensive (see Table 19). However, there were perhaps another eight Chinese items, mostly jewellery and cigarette holders, that may have been made in China after 1989. The style, texture and low price strongly suggest that these items are modern, but it is very difficult to be certain. Once again, almost all these modern items were crafted in China.

Table 19

Recently-made (post-1989) ivory items seen in the Washington, D.C. area, December 2006

<i>Item</i>	<i>No. of items</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price in USD</i>
Necklace, small beads	2	1 cm beads	China	30
<u>Total no. of items</u>	<u>2</u>			

Antique markets in the Washington, D.C. area

There were no antique markets selling ivory, but there was a flea market with just one ivory item. It was called the Capitol Hill Flea Market, opposite the Eastern Market, off Pennsylvania Avenue. One stall owner displayed a tiny Chinese carved flower-brooch of 1 cm for USD 1.

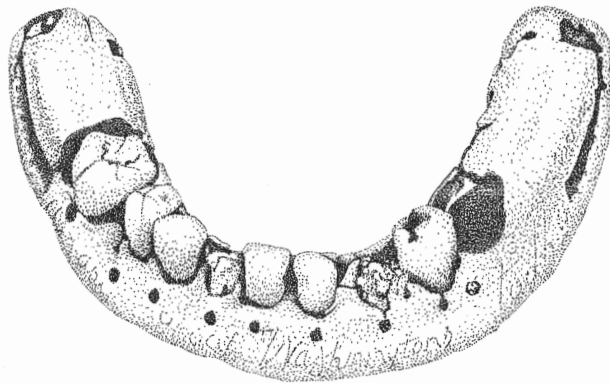


Antique shops in the Washington, D.C. area

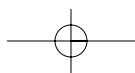
There were 12 antique shops selling only 96 ivory items. The shop with the most items was in Kensington in Maryland and had 45 ivory objects. The average number of ivory items per retail outlet in the Washington, D.C. area was only eight. Except for Atlanta, this was the lowest figure for any city surveyed in the eastern USA. The main reason is that there is no market for ivory items. The antique shops had a greater variety of ivory items for sale compared with the low overall number of items. The Kensington shop had Chinese figurines and jewellery, European figurines, paperknives, glove stretchers, boxes, and Japanese figurines and netsukes.

In an antique shop in Alexandria, Virginia, there were two American-made antiques. One was a late-19th-century wooden walking stick inlaid with ivory and silver for USD 550; the other was a miniature sewing chest (20 x 20 cm and 15 cm in width) made in New England c.1790 of maple wood with ivory knobs for USD 950. American-made non-utilitarian antiques are extremely rare to find for retail sale nowadays anywhere in the world.

One confirmed African ivory item was seen in the Washington, D.C. area. It was a 20-cm carved tusk dated 'pre-World War II' in an antique shop in Kensington. The asking price was USD 700.



George Washington's dentures with natural teeth and ivory base



Gift shops in the Washington, D.C. area

Eight gift shops had ivory carvings but, of the 96 items seen, none was exceptional. Most, 35, were 20th-century jewellery pieces, more than any other item. Most were from China and Europe and cheaply priced. The next most numerous were figurines made in Asia and Europe.

Jewellery shops in the Washington, D.C. area

Four jewellery outlets displayed 43 ivory items. A shop on Connecticut Avenue in the city of Washington, D.C. had most. It had 27 items, 12 being pieces of jewellery, and also 12 unusual Japanese-made plain, solid balls about 3 cm in diameter for USD 35 each. Another jewellery shop displayed four Victorian items: a bookmark for USD 650, a bracelet for USD 650, an 8-cm pendant for USD 650 and an 18-cm ivory case holding a thermometer for USD 1,650. These were some of the oldest and most expensive items seen for sale in the Washington, D.C. area.

Retail prices in the Washington, D.C. area

Table 20 gives the retail prices for some of the more common ivory items seen in the Washington, D.C. area. Prices were lower than other cities surveyed on the East Coast as there were few rare, expensive objects. Collectors can take a one-hour flight to New York City to view the finest and largest number of ivory objects for sale in North America. The cheapest priced ivory items were made in China. The cheapest of all was the dollar brooch just mentioned.

Table 20

Retail prices for ivory items seen in the Washington, D.C. area, December 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1 (width)	?	95
Bracelet	3 (width)	UK	650
Brooch	1	China	1
Necklace, small beads		China	30
Pendant	8	UK	250-650
FIGURINES			
	5-10	China	60-75
		India	35
	11-20	Japan	375-450
TUSKS, Carved			
	20	Africa	700
MISC.			
Box	5-8	China	34-275
	18	UK	6,250
Cigarette holder	9	?	85
Magnifying glass handle	25-30	UK	450
Walking stick handle	8	UK	450
	8	Japan	550



PALM BEACH

Palm Beach in the state of Florida is a small island attached by a bridge to the mainland. During the summer months the population shrinks to 10-12,000, but in the winter season the island attracts several thousand more people who wish to escape the cold weather of northern USA and Europe.

The town was established at the end of the 19th century, largely as a result of the opening of the Florida East Coast Railway in 1894. By the middle of the 20th century some of the richest people in the USA and Europe had built luxurious homes for themselves and their influential friends. Developers built expensive private clubs, lavish hotels, yacht harbours and one of the most exclusive shopping streets in the world, Worth Avenue. With a good winter climate, luxurious amenities, strict zoning of land and no manufacturing, Palm Beach remains one of the most exclusive winter resorts in the world. Consequently, this tiny community has one of the highest per capita incomes anywhere in North America. Many of those originally from the greater New York City area came with a tradition of being collectors of fine art. Thus there is a market in Palm Beach for antiques and expensive ivory items.

A total of 10 outlets selling 885 ivory items was found in Palm Beach. Almost all those selling ivory were located in or around Worth Avenue. Most were antique shops (see Table 21). The most numerous items for sale were 437 figurines (49%) and 380 netsukes (43%), see Table 22.

Table 21

Types of retail outlets and number of ivory items surveyed in Palm Beach, November 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique shop	8	80	874	109
Jewellery shop	1	10	10	10
Gift shop	1	10	1	1
<u>Total</u>	<u>10</u>	<u>100</u>	<u>885</u>	<u>89</u>

Table 22

Ivory items seen for retail sale in Palm Beach, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Figurine	437	49
Netsuke	380	43
Walking stick handle	16	2
Card case	10	1
Box	8	1
Misc.	34	4

All 885 items could be identified by country or region. Japanese pieces followed by Chinese pieces totalled 409 (46%) and 407 (46%) after which there were 58 European pieces (6%) and 11 Indian items (1%) as shown in Table 23.

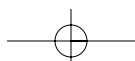




Table 23

Types of ivory items made in countries/regions seen for sale in Palm Beach, November 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
Japan	Netsuke	309	76
	Figurine	98	24
	Misc.	2	
	<u>Sub-total</u>	<u>409</u>	
China	Figurine	312	77
	Netsuke	71	17
	Card case	10	2
	Canton magic ball	4	1
	Vase, snuff bottle	3 each	1
	Carved tusk	2	
	Misc.	2	
	<u>Sub-total</u>	<u>407</u>	
Europe	Figurine	26	45
	Walking stick handle	16	28
	Miniature painting on tea caddy	4 each	14
	Paperknife	2 each	7
	Misc.	4	7
	<u>Sub-total</u>	<u>58</u>	
India	Box	8	73
	Misc.	3	27
	<u>Sub-total</u>	<u>11</u>	
	<u>Grand total</u>	<u>885</u>	

Recently-made (post-1989) ivory items in Palm Beach

One antique shop may have displayed three ivory items made after 1989: a pair of 58-cm human figures from China for USD 9,000, two carved tusks (not a pair) each about 65 cm, crafted in China and priced at USD 2,000 each (see Table 24).

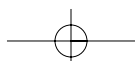
Table 24

Recently-made (post-1989) ivory items seen in Palm Beach, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price in USD</i>
Figures, pair	1	58	China	9,000
Tusk, carved	2	65	China	2,000
<u>Total no. of items</u>	<u>3</u>			

Antique shops in Palm Beach

Eight shops were seen displaying a total of 874 ivory items. One antique shop dominated. It had about 843 ivory objects or 95% of all those seen for sale in Palm Beach. It was a true antique shop and had no recently-made items. This two-storey shop is on Worth Avenue and has been there for 20 years. The owner offers the largest collection of ivory for retail sale in Florida and perhaps for all the southeast part of the USA. He has a reputation of buying most of his items from auctions and dealing in the highest quality pieces, especially from Japan. Of the estimated



843 ivory items in his shop, 49% were from Japan, mostly netsukes, 47% from China, mostly figurines, and 3% were from Europe. This shop displayed the most expensive items in Palm Beach and apparently the whole of Florida. They included a set of four human figures, 45-cm high, beautifully carved in Europe for USD 450,000; a 65-cm cabinet covered fully in ivory carved into more than 400 quails and signed by Yoshikazu from the early Meiji period for USD 275,000; a 70-cm tall human figure carved in the late 19th century in Germany for USD 125,000; a pair of tusks carved in Japan in the early Meiji period for USD 48,000; and several small 10-cm (but exquisitely carved) human figurines from France for USD 2,450 each. Bargaining can discount these prices by 25% or more.

The antique shop with the second most items (nine) specialized in Indian carvings. It had six boxes from 13-18 cm of tortoise shell inlaid with ivory for USD 1,250-1,950 each, two ivory and wood boxes 20-cm long for USD 1,250 each, and one 20-cm ivory inlaid sewing box for USD 1,750; all made in the 19th and early 20th centuries.

Jewellery shops in Palm Beach

There was only one jewellery shop with ivory. It had 10 items that included two figurines, two netsukes, a necklace, a couple of rings and a pendant. It sells mostly jewellery and small ornaments acquired from the estates of bankrupt or deceased people.

Gift shops in Palm Beach

Located off Worth Avenue, one Palm Beach gift shop had a lone ivory item. It was an Indian 10-cm ivory elephant with a tiger attacking it on top for USD 285.

Retail prices in Palm Beach

Table 25 shows the prices for various items seen in Palm Beach, November 2006

Table 25

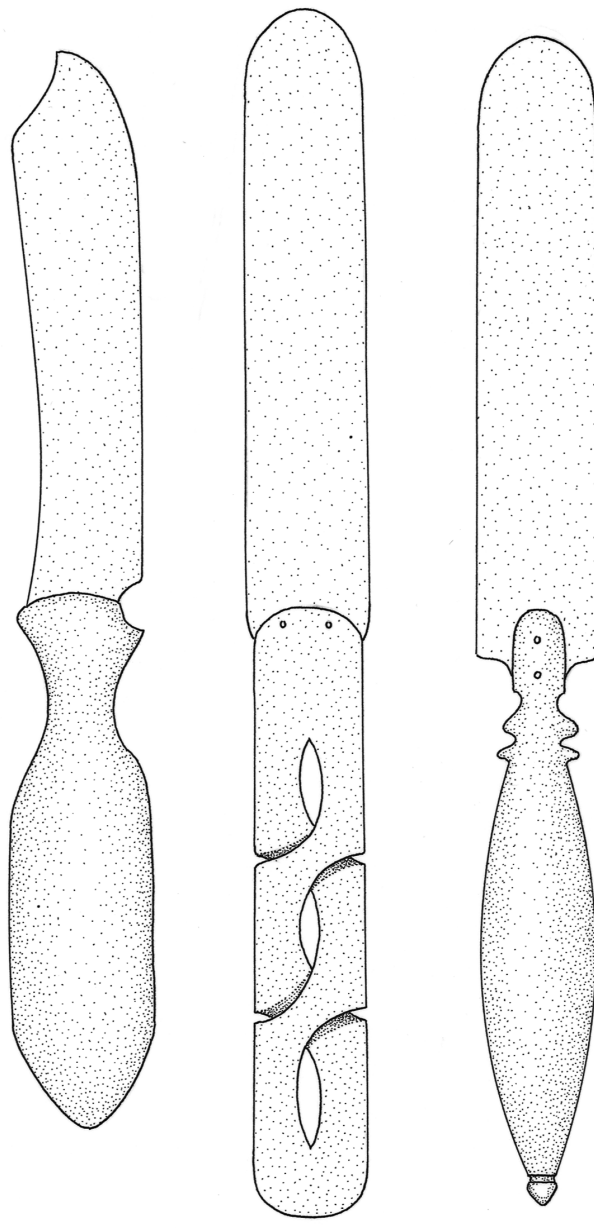
Retail prices for ivory items seen in Palm Beach, November 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price in USD</i>
JEWELLERY			
Necklace		China	95
FIGURINES			
	5-10	Africa	95
		India	285
		France	2,450
	35-45	China	3,750
		Japan	15,000
		Europe	112,500
	58	China	4,500
	70	Germany	125,000
Netsuke	5-6	Japan	2,000-85,000
TUSKS			
Carved	65	China	2,000
	65	Japan	24,000
MISC.			
Box	13	India	1,250
	18-20	India	1,250-1,950
Canton magic ball (15 layers)		China	1,250
Chess set with ivory pieces	10	China	90,000
Paperknife	20	UK	125
		France	450
Walking stick handle	7	UK	540-575

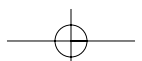


The prices for ivory objects in Palm Beach were high generally because the quality of some of the items was outstanding and some pieces were unique. Other objects, however, were priced well above their market value, such as some of the European and Chinese figurines. For example, the USD 90,000 chess set, a relatively modern item made in India in the 1950s or 1960s, was selling for several times its value. Many Palm Beach residents and visitors are rich and not price sensitive, so items can sell at exorbitant prices.

Sometimes shop owners will encourage a customer's enthusiasm for expensive pieces by inviting them to discuss the items over lunch and a bottle of wine. There was little jewellery for sale as the vendors specialize in higher priced items.



Paper-knives, USA



WEST PALM BEACH

West Palm Beach is on the Florida mainland, directly opposite Palm Beach. It is a tourist centre with a major airport, but also the commercial, industrial, and financial hub of the area. The city is much larger than Palm Beach. The ivory shops are in two areas: the exclusive shopping complex called 'City Place' and along South Dixie Highway. There were 14 outlets found selling 528 ivory items (see Table 26). These outlets consisted of 12 antique shops, one estate sales outlet, and a gift shop.

Table 26

Types of retail outlets and number of ivory items surveyed in West Palm Beach, November 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no of item per outlet</i>
Antique shop	12	86	524	44
Misc. outlet	1	7	4	4
Gift shop	1	7	1	1
<u>Total</u>	<u>14</u>	<u>100</u>	<u>529</u>	<u>38</u>

The most common objects for sale were netsukes 299 (57%) and figurines 185 (35%) as shown in Table 27. There were 517 items that could be identified by the country of origin/region of manufacture. Of these 264 (51%) were made in Japan, 220 (43%) in China, 27 (5%) in Europe and 4 (1%) in India (see Table 28).

Table 27

Ivory items seen for retail sale in West Palm Beach, November 2006

<i>Item</i>	<i>No of items</i>	<i>Percentage of total</i>
Netsuke	299	57
Figurine	185	35
Box	10	2
Jewellery	9	2
(Necklace)	7	2)
(Bangle)	1	<1)
(Pendant)	1	<1)
Paperknife	4	1
Tusk, carved	3	
Brush holder	2	
Snuff bottle	2	
Banjo, miniature	1	
Canton magic ball	1	
Chess set	1	
Cigarette holder	1	
Chinese landscape	1	
Magnifying glass handle	1	
Napkin ring	1	
Teapot parts	1	
Walking stick handle	1	
Misc.	6	
<u>Total</u>	<u>529</u>	

Table 28

Types of ivory items made in countries/regions seen for sale in West Palm Beach, November 2006

Country /region	Item (in order of quantity)	No.	%
China	Figurine	131	50
	Netsuke	124	47
	Bangle, Canton magic ball, necklace, snuff bottle	2 each	3
	Chinese landscape, tusk carved, walking stick handle	1 each	1
	<u>Sub-total</u>	<u>266</u>	
Japan	Netsuke	175	80
	Figurine	43	20
	Brush-holder	2	
	<u>Sub-total</u>	<u>220</u>	
Europe	Figurine	10	37
	Box	8	30
	Paperknife	4	15
	Furniture, magnifying glass handle, teapot, walking stick handle	1 each	15
	Misc.	1	4
	<u>Sub-total</u>	<u>27</u>	
India	Box	2	50
	Figurine	2	50
	<u>Sub-total</u>	<u>4</u>	
<u>Grand total</u>		<u>517</u>	

Recently-made (post-1989) ivory items in West Palm Beach

No ivory items made after 1989 were seen in the retail outlets of West Palm Beach.

Antique shops in West Palm Beach

Two of the 12 antique shops found were owned by the same senior management. Both are in City Place and together they offered for sale 89% of all the 524 ivory items displayed in the city. Their vendors were forceful salesmen. One shop was selling 282 items, mostly Japanese netsukes (158) from USD 75 to USD 500, which is quite cheap; it also had 82 crudely carved Chinese erotic figurines for only USD 135-150. The other shop, which offered 187 items, displayed at least 121 Chinese netsukes from USD 200-600. The remaining 10 shops had mostly inexpensive objects with very few outstanding ivory antiques. One exception was a tortoise shell and ivory box, 13cm long, made in UK in the 19th century for USD 5,750. Unlike Palm Beach, the antique shops in West Palm Beach had few valuable pieces.

Gift shops in West Palm Beach

There was just one gift shop located on South Dixie Highway with ivory. It had only one ivory item, a European-made 8-cm figurine.

Miscellaneous shops in West Palm Beach

Estate sales shops sell deceased people's property or goods bought from bankrupts. One such was found on South Dixie Highway and had for sale two Chinese-made netsukes and two Chinese figurines.

Retail prices in West Palm Beach

Table 29 gives the prices for the more common items seen in West Palm Beach. Overall, prices were low. Collectors and other buyers can cross the bridge to Palm Beach where there is a larger supply of better quality items. The ivory vendors in West Palm Beach cannot compete with some of the shops in Palm Beach, which supply the high-end market.

Table 29

Retail prices for ivory items seen in West Palm Beach, November 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
FIGURINES			
Human	5-10	Africa	95
		Europe	95
		China	135-150
		India	175
Netsuke	5-6	Japan	75-500
		China	200-600
TUSKS, Raw	90	Africa	5,800
MISC.			
Box	15	India	275
	10-20	UK	695-5,750
Chess set	7	West Africa	3,400
Magnifying glass handle	20	UK	195
Paperknife	10	UK	395
Walking stick handle	6	Europe	250

GREATER MIAMI

Greater Miami is the largest urban conurbation in Florida with a population of more than two million people covering Miami and a huge area around the city. Miami is the major city in southeastern USA. It has a large international airport with many daily flights, especially to Latin America. Like Palm Beach and West Palm Beach, Greater Miami is a popular tourist destination. It is also a large business and industrial centre. A total of 11 retail outlets with 865 ivory items was surveyed in all the Greater Miami area (see Table 30). Coral Gables was not surveyed due to lack of time. The investigator instead spent more time in Miami Beach, which is the centre of the tourist trade in Greater Miami (being very popular for rich Americans and foreigners, especially those with new wealth). He also surveyed extensively the central business district of Miami, North Miami, Hallandale Beach, Dania Beach, South Dixie Highway, and Biscayne Boulevard. Greater Miami had no antique markets. There were, however, eight gift shops, one antique shop, one 'homes and gardens' shop, and one modern furniture shop. The most common items for sale were netsukes, 510 (59%), and figurines, 334 (39%) as seen in Table 31.

Table 30

Types of retail outlets and number of ivory items surveyed in Greater Miami, November/December 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Gift shop	8	73	618	77
Antique shop	1	9	230	230
Misc. outlet	2	18	17	17
<u>Total</u>	<u>11</u>	<u>100</u>	<u>865</u>	<u>79</u>

Table 31

Ivory items seen for retail sale in Greater Miami, November/December 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Netsuke	510	59
Figurine	334	39
Jewellery	9	1
(Bangle)	2)	
(Necklace)	2)	
(Pendant)	2)	
(Bracelet)	1)	
(Brooch)	1)	
(Earrings, pair)	1)	
Box	6	1
Cigarette holder	2	
Inro	1	
Paperknife	1	
Snuff bottle	1	
Tusk, carved	1	
<u>Total</u>	<u>865</u>	<u>100</u>

Of the 848 ivory items which could be identified by country or region of manufacture, 551 (65%) were from Japan, 234 (28%) from China, 59 (7%) from Europe, 3 from India and 1 from Africa as shown in Table 32.



Table 32

Types of ivory items made in countries/regions seen for sale in Greater Miami, November/December 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
Japan	Netsuke	425	77
	Figurine	125	23
	Inro	1	
	<u>Sub-total</u>	551	
China	Figurine	154	66
	Netsuke	79	34
	Necklace	1	
	<u>Sub-total</u>	234	
Europe	Figurine, Art Deco	55	93
	Cigarette holder	2	3
	Misc.	2	3
	<u>Sub-total</u>	59	
India	Bangle	2	67
	Paperknife	1	33
	<u>Sub-total</u>	3	
Africa	Carved tusk	1	100
	<u>Grand Total</u>	<u>848</u>	

Recently-made (post-1989) ivory items in Greater Miami

None of the ivory objects seen could be confirmed as recently made. However, at least 20 Chinese netsukes in one gift shop looked quite new. The manager was reluctant to talk about them and at first said they were made from hippo teeth. When the investigator inspected them, the manager admitted they were ivory. He explained that he prefers to tell customers that they are hippo teeth so they can be more easily sold.

Gift shops in Greater Miami

Eight gift shops were offering for sale 618 ivory items. The shop with the most items (504) was in Miami Beach. It was similar to the large gift shops in New York City, selling mostly furniture, bronzes, Art Deco figures and porcelain. Also, as in New York City, it even displayed a banner stating 'Closing Down Sale'; the business is supposedly moving to a shop near by. The owner used to have a similar shop in New York City, but closed it down. The most common items in his Miami Beach shop were Japanese netsukes for USD 650-675 each, followed by Japanese and Chinese figurines and figures of many sizes.

The shop with the next most ivory items was also in Miami Beach, the shop with the so-called hippo teeth netsukes mentioned above. This shop displayed 60 ivory items, including 25 Art Deco figurines and figures, all women. A typical Art Deco 20-cm figurine was USD 17,000.

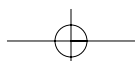
The other six gift shops were scattered elsewhere in Greater Miami selling just a few 20th-century items of low value.

Antique shops in Greater Miami

The only true antique shop seen in Greater Miami is owned by a South African who set up his business in 2000. There were 230 ivory items for sale. Most were Japanese and Chinese figurines generally of very high quality. There were also 41 Japanese ivory netsukes on display and 23 Art Deco European figures with ivory parts. The most expensive item was a pair of human figures carved by Dimitri Chiparus for USD 150,000.

Miscellaneous shops in Greater Miami

There was a homes and gardens furniture shop selling both retail and wholesale goods in a



warehouse/office/showroom. Most of the warehouse was taken up with large bronzes, wooden furniture and cow bone carvings; all made in southeast China (for details on these large composite cow bone carvings, please see Martin, 2006). In the showroom there was an unusual carriage pulled by horses made of hippo teeth, also made in China. The owners regularly go to southeast China to buy merchandise. Of the many hundreds of Chinese items, some of which were very extravagant and brash, there were only 16 ivory items, all in the showroom. These were Chinese carved figurines and were exhibited in a glass cabinet.

There was also a shop selling modern furniture that had one ivory item. This was a bead necklace with a carved 9-cm pendant attached made fairly recently in China for USD 289. The manager claimed it was part of his old stock, the rest of which he has sold and was not replacing.

Retail prices in Greater Miami

Table 33 lists the prices of various ivory items for sale in Greater Miami. Most are cheap, such as the jewellery, but there are also Art Deco items of high quality that are expensive.

Table 33

Retail prices for ivory items seen in Greater Miami, November/December 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Brooch	3	Europe	26
Earrings, pair	2	China	18
Necklace	1	China	55-289
Pendant	3	China	14
	6	Europe	100
FIGURINES			
Human (& animal)	5-10	China	129
	11-20	Europe	17,000
Human figure	50-70	Europe	9,000-150,000
Netsuke	6-7	Japan	650-675
MISC.			
Paperknife	16	India	44

ATLANTA

Atlanta is the capital and largest city of Georgia State. It is one of the fastest growing cities in southeastern USA. It is a financial, commercial and education centre for the region. Atlanta had 22 outlets selling 150 ivory items of mediocre quality. The shopkeepers say the paucity of expensive or exquisitely carved ivory objects results from the lack of serious collectors in this state. Eight of the outlets were in Miami Circle, a group of nearly 30 shops specifically built as antique and gift shops in the mid-1980s. Bennett Street had seven outlets followed by three on Peach Tree Road and two in another group of 10 or so antique/gift shops built in 2005 called the Galleries of Peach Tree Hill. Table 34 gives the types of retail outlets and the number of ivory items surveyed. There were 43 figurines (27%), 26 boxes (16%), and 12 jewellery items (8%) as shown in Table 35.

Table 34

Types of retail outlets and number of ivory items surveyed in Atlanta, November 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique shop	17	77	87	5
Antique market	1	5	55	55
Gift shop	3	14	10	3
Piano shop	1	5	6	6
<u>Total</u>	<u>22</u>	<u>101</u>	<u>158</u>	<u>7</u>

Table 35

Ivory items seen for retail sale in Atlanta, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Figurine	43	27
Box	26	16
Jewellery	12	8
(Necklace	4	3)
(Earrings, pair	3	2)
(Pendant	3	2)
(Bangle	1	1)
(Bracelet	1	1)
Paperknife	7	4
Magnifying glass handle	6	4
Piano, ivory keys	6	4
Prayer book cover	5	3
Snuff bottle	5	3
Kohl bottle	4	3
Miniature painting	4	3
Page turner	3	2
Banjo, miniature	2	1
Brush	2	1
Chess pieces	2	1
Game	2	1
Glove stretcher	2	1
Name seal	2	1
Napkin ring	2	1
Tusk, carved	2	1
Misc.	21	13
<u>Total</u>	<u>158</u>	<u>97</u>

The origins of 129 ivory items were identified: 76 (59%) were made in Europe, mostly the UK, 42 (32%) in China, 8 (6%) in Japan and 4 (3%) in Africa (see Table 36).

Table 36

Types of items made in countries/regions seen for sale in Atlanta, November 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
Europe	Box	21	28
	Miniature painting	8	11
	Magnifying glass handle	5	7
	Necklace, paperknife, prayer book cover	4 each	16
	Page turner	3	4
	Misc.	27	36
	<u>Sub-total</u>	<u>76</u>	
China	Figurine	24	59
	Snuff bottle	5	12
	Kohl bottle	4	10
	Misc.	8	20
	<u>Sub-total</u>	<u>41</u>	
Japan	Figurine	8	100
	<u>Sub-total</u>	<u>8</u>	
Africa	Carved tusk	2	50
		1	25
	Serving spoon and fork	1	25
	<u>Sub-total</u>	<u>4</u>	
<u>Grand total</u>		<u>129</u>	

Recently-made (post-1989) ivory items in Atlanta

Out of the 158 ivory items seen in Atlanta, no pieces made after 1989 were identified with certainty. There was, however, a large gift and furniture shop owned by a Chinese man that displayed six ivory items: four figurines, a group of flowers and a bangle that were certainly not old. One or more may have been made after 1989 but the ages could not be confirmed. The shop owner said he used to sell ivory netsukes but had sold out of them; he would not specify dates as he was suspicious.

Antique markets in Atlanta

There was only one antique market in Atlanta (see Table 37). This was a permanent market, but as it had only small booths rather than stalls with vendors operating at a central desk, so it was counted as one outlet. It sold inexpensive items of a great variety, mostly 20th century objects.

Table 37

Number of ivory items seen in Atlanta markets, November 2006

<i>Name of market</i>	<i>No. of items</i>
14th Street Antiques Market	55

14th Street Antiques Market

There were 55 ivory items in this outlet, mostly made in the UK and China. The most expensive ivory items were a 15-cm tall Chinese human figurine for USD 1,500, a 25-cm Chinese human figure for USD 1,250 and a European large-bead necklace for USD 1,200. The earliest pieces were 19th -century objects. The most common items were human figurines, jewellery and utilitarian items.



Antique shops in Atlanta

There were 17 antique shops selling 87 ivory items. None had many items, the average being five per shop. The one with the most had 25 items and was in the Miami Circle group of shops. The most expensive objects were three Chinese 30-cm human figures for USD 1,200 each, and two 40-cm tusks carved in Africa for USD 600 each; the manager said that the tusks had been obtained from a missionary in Africa. Bennett Street held a shop with 14 items of which the most expensive item was a 35-cm Chinese container, poorly carved, priced at USD 1,800.

Gift shops in Atlanta

Atlanta had three gift shops with 10 ivory items in total. One was the Chinese gift shop with six possibly recently-made ivory items already mentioned. It was a very large shop occupying one huge floor. The owner claimed to be the largest importer of Chinese goods in southern USA, and sold so-called antiques and reproduction Chinese furniture. The ivory items, as is often the case, were not clearly priced and the shop owner was reluctant to give figures except for one item: an 8-cm elephant figurine for USD 580.

The gift shop with the second largest number of ivory items had just three objects. These were two Oriental games with dice and one tusk tip used as a paper weight, probably polished in Europe.

Piano shops in Atlanta

No piano shop was seen in Atlanta on this visit, but there was a piano display. In the famous Phipps Plaza Shopping Center in Buckhead, a prosperous suburb, a company from Asheville, North Carolina, had taken space on the ground floor to display for sale old pianos. Six of about a dozen had ivory piano keys. The most expensive of these was a Weber Grand Player Piano made in the USA in 1875 for USD 40,000. The least expensive was a Lyon and Healy Cottage upright player piano made in the USA in 1888 for USD 12,500.

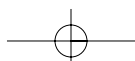
Retail prices in Atlanta

Table 38 gives the retail prices for the more common ivory objects offered for sale in Atlanta.

Table 38

Retail prices for ivory items seen in Atlanta, November 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bracelet	6	Europe	169
Necklace, beads	various	Europe	500-1,200
Pendant		Europe	65
Ring		Europe	95
FIGURINES			
	5-10	China	75-580
		Africa	450
	11-20	China	650-1,500
		Japan	750
	30	China	1,200
TUSKS, Carved			
	40	Africa	600
MISC.			
Box	8-12	UK	285-5,650
	35	China	1,800
Brush	15	Europe	275
Fan	8	Europe	850
Magnifying glass handle	8-10	UK	74-575
	22-25	UK	575-650
Miniature painting	8	Europe	650-850
Page turner	15-25	UK	98-175
Paperknife	15-20	UK	40-325



CHICAGO

The retail outlets selling ivory objects in Chicago, Illinois, were scattered throughout the city: 18 were found selling 255 ivory items. The numbers of shops and ivory pieces were low considering the city is the third largest in the USA.

In the 1930s and early 1940s Chicago had more ivory collectors than today and also several important Japanese and Chinese dealers. During World War II the dealers disappeared for political reasons leaving Hisazo Nagatoni the only Japanese trader in the 1970s. In the 1980s the last major ivory collector died in the suburb of Oak Park (Bennet Bronson, Curator, Asian Anthropology, The Field Museum of Natural History, Chicago, pers. comm., November 2006). Many other smaller collectors have also died and not been replaced. The few remaining can nowadays take a short, two-hour flight to New York City, the centre of this trade. Most of them are not prolific buyers of expensive pieces so Chicago attracts few dealers. Wealthy collectors in Chicago tend to have large and spacious houses compared with New Yorkers and so prefer to collect furniture rather than small items that occupy little space, such as netsukes and figurines (Doug van Tress, proprietor of The Golden Triangle, Chicago, pers. comm., November 2006). Another reason for the lack of ivory on sale is that shopkeepers are wary of stocking it after several high-profile arrests of people selling endangered wildlife products. One antique dealer said he had an entire jewellery collection that included ivory, confiscated by the government authorities and so was now reluctant to deal in ivory. This problem seems to have occurred only in Chicago.

Most of the ivory items seen (81%) were found in 13 antique shops, largely in and around West Kinzie Street (see Table 39), followed by antique markets and gift shops. Most of the items were figurines (36%), netsukes (11%) and jewellery (10%), see Table 40. There were 226 items that could be attributed to their place of origin, and of these 92 (41%) were from China, 67 (30%) from Japan, 55 (24%) from Europe, 10 (4%) from Africa, and 2 (1%) from India (see Table 41). The few unattributable items probably came from China judging by their style.

Table 39

Types of retail outlets and number of ivory items surveyed in Chicago, November 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique shop	13	72	206	16
Antique market	2	11	34	17
Gift shop	3	17	15	5
<u>Total</u>	<u>18</u>	<u>100</u>	<u>255</u>	<u>14</u>

Table 40

Ivory items seen for retail sale in Chicago, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Figurine	92	36
Netsuke	27	11
Jewellery	25	10
(Necklace)	8	3)
(Bangle)	5	2)
(Brooch)	4	2)
(Earrings, pair)	3	1)
(Ring)	3	1)
(Arm-bangle)	1	<1)
(Pendant)	1	<1)
Box	12	5
Plaque, carved	8	3



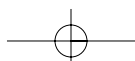
Table 40 continued

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Furniture	7	3
Sculpture	6	2
Mask	5	2
Cigarette holder	4	2
Art Deco figurine	3	1
Canton magic ball	3	1
Fan	3	1
Finial (ornament)	3	1
Knife (throwing)	3	1
Picture frame	3	1
Chinese landscape	2	<1
Cup	2	
Dish	2	
Name seal	2	
Misc.	38	15
<u>Total</u>	<u>255</u>	<u>100</u>

Table 41

Types of ivory items made in countries/regions seen for sale in Chicago, November 2006

<i>Country /region</i>	<i>Item (in order of quantity)</i>	<i>No.</i>	<i>%</i>
China	Figurine	52	57
	Plaque (carved)	10	11
	Snuff bottle	5	5
	Canton magic ball, cigarette holder, earrings (pair), finial (ornament)	3 each	13
	Misc.	13	14
	<u>Sub-total</u>	<u>92</u>	
Japan	Figurine	32	48
	Netsuke	25	37
	Misc.	10	15
	<u>Sub-total</u>	<u>67</u>	
Europe	Figurine	8	15
	Furniture with inlay, necklace	6 each	22
	Box, brooch	4 each	15
	Picture frame	3	5
	Arm bangle, dish, name seal	2 each	11
	Misc.	18	33
	<u>Sub-total</u>	<u>55</u>	
Africa	Figurine	4	40
	Knife (throwing), misc.	3 each	60
	<u>Sub-total</u>	<u>10</u>	
India	Figurine, hunting trophy	1 each	50
	<u>Sub-total</u>	<u>2</u>	
	<u>Grand total</u>	<u>226</u>	





Recently-made (post-1989) ivory items in Chicago

Only about nine confirmed recently-made ivory items were seen for sale (see Table 42). They were all Chinese pieces. Most were in a Chinese-owned gift shop on Michigan Avenue. In China Town there were five ivory items in two gift shops. Some of these may have been made after 1989, but were not included in the nine confirmed items as it was difficult to be certain they were new.

Table 42

Recently-made (post-1989) ivory items seen in Chicago, November 2006

<i>Item</i>	<i>No. of items</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price in USD</i>
Figurine, human	4	5	China	119-299
Cigarette holder	3	9	China	69
Figurine set (3 humans)	1	6	China	140
Netsuke	1	5	China	
<u>Total no. of items</u>	<u>9</u>			

Antique markets in Chicago

The Broadway Antique Market and the Edgewater Antique Mall, both on North Broadway, were two so-called antique markets and had 34 ivory items for sale. The booths were so small in both markets, with a central desk and vendors supervising all the booths, that individual outlets could not be separated, so each market is considered an outlet. Both markets were mainly selling 20th century household goods, furniture and modern paintings of mediocre quality. There were many items made of Bakelite – a resin invented in the USA by the Belgian-born Leo Baekeland in 1907 (Woodman 2006); this plastic mostly replaced celluloid, the first popular synthetic material, and contributed to the early 20th century decline in the use of ivory. There were 19 and 15 ivory items in the two markets respectively (see Table 43); most were inexpensive 20th-century items; none were outstanding.

Table 43

Number of ivory items seen in Chicago markets, November 2006

<i>Name of market</i>	<i>No. of items</i>
Broadway Antique Market	19
Edgewater Antique Mall	15
<u>Total</u>	<u>34</u>

Broadway Antique Market

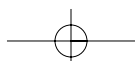
This market had 19 ivory items, including a walking stick with an ivory handle for USD 65, a pair of European cufflinks for USD 38, and a 10-cm pickle fork with an ivory handle made in the 1920s in Europe for USD 20.

Edgewater Antique Mall

There were 15 ivory items in this market, including an African bangle for USD 45, a Chinese netsuke for only USD 25, a German brooch for USD 55, bead necklaces from USD 60-85, and rings for USD 28.

Antique shops in Chicago

The survey found 13 antique shops offering 206 ivory items. One antique shop had more ivory items for sale, 168, than all the other antique shops and retail outlets put together. It is on West Kinzie Street, one of the main antique areas of the city. The shop sold a wide variety of ivory items originating from China, Japan, Europe (UK, Germany, France and Austria), Africa, India and Indonesia (Bali). The finest pieces included a Chinese fan from the 19th century for USD 3,800, a 15-cm 19th-century Japanese travelling shrine for USD 900, and a 7-cm, Goan-carved female figurine made in the 19th century for USD 1,250. The antique shop with the second largest number of ivory objects had only 16 and also offered items from Japan, China, UK, France and Italy. One unusual item was an 18-cm crucifix made probably in the 19th century, priced at USD 1,000.



Retail prices in Chicago

Table 44 shows the prices for various items seen in Chicago.

Table 44

Retail prices for ivory items seen in Chicago, November 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	2	Africa	45
Brooch	5	Germany	20-55
Necklace, small beads		China	60-85
Ring	1	China?	28
FIGURINES			
Human	av. 6	China	59-299
	13	Africa	675
	18	China	5,000
Netsuke	5	China	25-125
TUSKS, Carved	35	Indonesia (Bali)	1,295
MISC.			
Box	8	Japan	2,300
	50	Europe	2,750
Cigarette holder	9	China	69
Fan	20	China	3,800
Picture frame	8	Europe	60

Chicago offered few expensive ivory items for sale due to the lack of buyers. The most expensive pieces were objects with ivory added to them, and thus the high prices had little to do with the ivory. For example, there was an early 19th-century Italian wooden bed with ivory spindles for USD 44,333 and a 19th-century British wooden cabinet with ivory inlay for USD 28,000 after a 33% discount. The cheapest items in Chicago were the pickling fork and German brooch for USD 20 each.



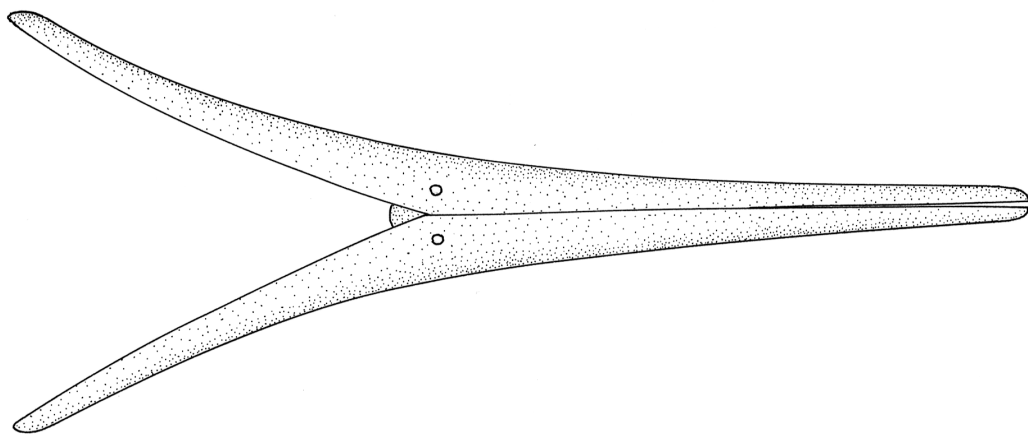
WESTERN USA

DALLAS

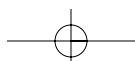
Dallas, Texas, is the ninth largest city in the USA with more than 1.2 million inhabitants. A total of 49 outlets selling 322 ivory items was found in Dallas and outlying towns. The types of outlets can be categorized as tourist markets (conglomerations of stalls, kiosks or shops in a large single- or multi-storey building), or individual antique shops. Table 45 shows a breakdown of the types of outlets and numbers of ivory items seen in Dallas.

Table 45
Types of retail outlets and number of ivory items surveyed in Dallas, April 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	40	82	269	7
Antique shop	9	18	53	6
<u>Total</u>	<u>49</u>	<u>100</u>	<u>322</u>	<u>7</u>



Glove stretcher, USA



The most numerous carvings for sale were 68 items of jewellery (21%), followed by human figurines (18%), netsukes (15%), chess pieces (11%) and eating utensil handles (9%) (see Table 46). Of the 277 items that could be attributed to a place of manufacture, 103 (37%) were European, 86 (31%) were Chinese, 40 (14%) were Japanese, 29 (10%) were East Asian (China, Taiwan or Japan), 14 (5%) were African, 3 (1%) were Indian and 2 (1%) were from the USA. Dallas had an unusually high number of ivory items manufactured in Europe.

Table 46
Ivory items seen for retail sale in Dallas, April 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Jewellery	68	21
(Bangle 0.5-1 cm)	9	3)
(Bangle 2 cm)	14	4)
(Bangle 2-4 cm)	3	1)
(Bangle 5 cm)	1	<1)
(Necklace, small beads)	3	1)
(Necklace, small beads with pendant)	2	1)
(Necklace, large beads)	5	2)
(Pendant)	9	3)
(Brooch)	5	2)
(Earrings, pair)	4	1)
(Ring)	13	4)
Human figurine	59	18
Netsuke	48	15
Chess piece	36	11
Eating utensil handle	28	9
Napkin ring	11	3
Animal figurine	8	2
Box	8	2
Paperknife	8	2
Carved tusk	6	2
Serving utensil handle	5	2
Candlestick holder	3	1
Opera glasses	3	1
Umbrella handle	3	1
African lip plug	2	1
Cane/walking stick handle	2	1
Cigarette case	2	1
Dance card binder	2	1
Snuff bottle	2	1
Carved hollow tusk section	2	1
Cigarette holder	1	<1
Misc.	15	4
<u>Total</u>	<u>322</u>	<u>100</u>

Recently-made (post-1989) ivory items in Dallas

Of the 322 ivory items found in Dallas, 155 could have been made before 1989, 145 appeared recently made and 22 were impossible to judge. Of the possibly post-1989 items, nine were from Africa and the rest from East Asia, consisting of jewellery items, netsukes, figurines, paperknives, chopsticks and cigarette holders. Therefore, about 45% of the ivory items could have been post-1989 in age of manufacture.

Antique markets in Dallas

Fourteen antique markets with a total of 40 outlets were found selling ivory (see Tables 47 and 48). The markets consisted of spacious buildings where individual dealers rented floor space and set up stalls from which to sell various types of collectibles, antiques and second-hand items. None specialized in ivory.



Table 47
Number of retail outlets in markets seen with ivory items in Dallas, April 2006

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory (approx.)</i>	<i>% with ivory</i>
Antiques & Collectibles	15	2	13
Antique Row	30	2	7
Antique Shoppe	10	2	20
Cathy's Antiques	20	3	15
City View Antique Mall	40	2	5
Connie Williamson Antiques	22	1	5
Debris	35	3	9
Dragon Street Antiques	10	3	8
Forestwood Antique Mall	130	4	3
Found	20	4	16
London	20	1	5
Love Field	200	6	3
Snider Plaza Antiques	20	2	10
Unlimited Antique Mall	200	5	3
<u>Total</u>	<u>772</u>	<u>40</u>	<u>5</u>

Table 48
Number of ivory items seen in Dallas markets, April 2006

<i>Name of market</i>	<i>No. of items</i>
Antiques & Collectibles	4
Antique Row	4
Antique Shoppe	10
Cathy's Antiques	16
City View Antique Mall	4
Connie Williamson Antiques	2
Debris	20
Dragon Street Antiques	15
Forestwood Antique Mall	21
Found	18
London	32
Love Field	55
Snider Plaza Antiques	2
Unlimited Antique Mall	66
<u>Total</u>	<u>269</u>

Antiques & Collectibles

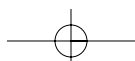
About 15 dealers use this small antique market on the corner of Parker and Preston Streets and only two had ivory. One dealer displayed two Chinese netsukes and one 11-cm Chinese figurine and another had only an ivory bangle.

Antique Row

This market was on Lovers Lane, a street that contained many antique shops. The market housed about 30 dealers, two of which displayed four ivory items, consisting of pendants, a large bead necklace and a pair of opera glasses.

Antique Shoppe

This small market on East Mockingbird Lane displayed goods from only 10 dealers. Two of these displayed a total of 10 ivory items, all jewellery, consisting of bangles, bead necklaces and rings.





Cathy's Antiques

An elderly lady owned this market on North Industrial Boulevard and she was trying to clear the stock in order to retire. About 20 dealers were represented, and three of them sold an interesting variety of foreign ivory items. Their stock included Chinese, Japanese, Indian and Dutch figurines, Chinese carved tusks (a 65-cm one started at USD 3,500 and was reduced to USD 2,500), two 18-cm Japanese brush pots with Shibayama inlay (USD 1,800), an English desk lamp made from a hollow tusk section (USD 1,500), a 6-cm wide carved bracelet (USD 395) and a Japanese netsuke. The only American ivory item was a 28-cm long by 13-cm high automobile made up of several assembled parts, priced at USD 6,750.

City View Antique Mall

Two of the about 40 dealers in this medium size market had four ivory pieces for sale. One had two small Chinese ivory figurines and the other had two necklaces with pendants. This Mall was on North Industrial Boulevard in the Trinity Antiques District.

Connie Williamson Antiques

Also in the Trinity Antiques District, this upscale antique market on Dragon Street sold antiques from 22 dealers. The only ivory item was a pair of fork and spoon salad servers.

Debris

This medium size market on Slocum Street on the edge of the Trinity Antiques District contained about 35 outlets. Three sold 20 ivory items comprising Japanese and French ivory figurines (the 10-cm French item was priced at USD 895), a cloth parasol with a 10-cm ivory handle (USD 950), two pairs of opera glasses, two paperknives, two dance card binders, two cigarette cases and other items.

Dragon Street Antiques

Only about 10 dealers were found at this recently opened market on Dragon Street that had space for more. Three outlets offered 15 ivory items consisting of a set of 12 silver forks with 8-cm ivory handles, two paperknives and an ivory pommel on a wooden walking stick.

Forestwood Antique Mall

This large market on Forest Lane contained about 130 dealers. Four outlets had 21 ivory items; nine jewellery pieces, seven small Chinese and European figurines, four utensil handles and one Chinese netsuke.

Found

On North Industrial Boulevard in Found, one of a pair of antique markets, four of about 20 vendors sold ivory, mainly napkin rings and brooches. The other of the pair, called Lost, had no ivory.

London

The only ivory item in this market of about 20 outlets on Lovers Lane was a 32-piece chess set priced at USD 750.

Love Field

This very large market was next to Love Field airport in north Dallas. Seven of about 200 outlets sold 55 ivory items made up of 13 ivory jewellery pieces, including a pikake flower necklace from Hawaii (USD 275), 21 Chinese figurines ranging in height from 3 cm to 27 cm (USD 25-425), animal figurines, utensil and brush handles, and a button hook with an 11-cm ivory handle (USD 15.50).

Snider Plaza Antiques

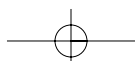
This cramped market in Snider Plaza had only two ivory items for sale, both 16-cm paperknives.

Unlimited Antique Mall

This large market with about 200 dealers was north of Dallas in Addison. Five outlets sold ivory, with 19 jewellery items, 42 Chinese and Japanese figurines and netsukes, two boxes, cigarette holders and paperknives. One vendor based there specialized in netsukes.

Antique shops in Dallas

The nine antique shops found scattered around the city contained only 53 ivory items. The two shops that carried the largest number both had 11 pieces. One of them, Joel Cooner, sold only African antiques displayed as in a



museum. The other shop, Gerald Tomlin, sold only Oriental items, including a 12-cm physician's lady. Other shops with ivory offered insignificant amounts.

Retail prices in Dallas

Table 49 shows the prices for various items seen in Dallas.

Table 49
Retail prices for ivory items seen in Dallas, April 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	China	100-140
	2-4	China	250
	6	Europe	395
Brooch	5-8	Europe	95-195
Necklace, small beads		China	100-149
Necklace, large beads		China	160-210
		USA (Hawaii)	275
Pendant	5	China	50
Ring		China	25-50
FIGURINES			
Animal	6-8	China	195-300
Human	5-10	China	115
		Japan	150-500
	Europe	895	
	11-20	China	195-385
		Europe	500
21-30	China	425	
	Europe	1,200-1,500	
	East Asia	185-5,000	
Netsuke	5-8		
TUSKS			
Carved	65	China	3,500
	62	Africa	1,200
Carved, hollow section	18	Japan	1,800
Lamp	25	Europe	1,500
MISC.			
Chess set (32 pcs)		Europe	750
Eating utensil handle	8-10	Europe	16-20
		?	16-50
Napkin ring		?	16-50
Opera glasses		Europe	200-795
Paperknife	18	?	395
	16	?	200
Serving utensil handle	17	Europe	195
Pommel on wood walking stick	7	Europe	395



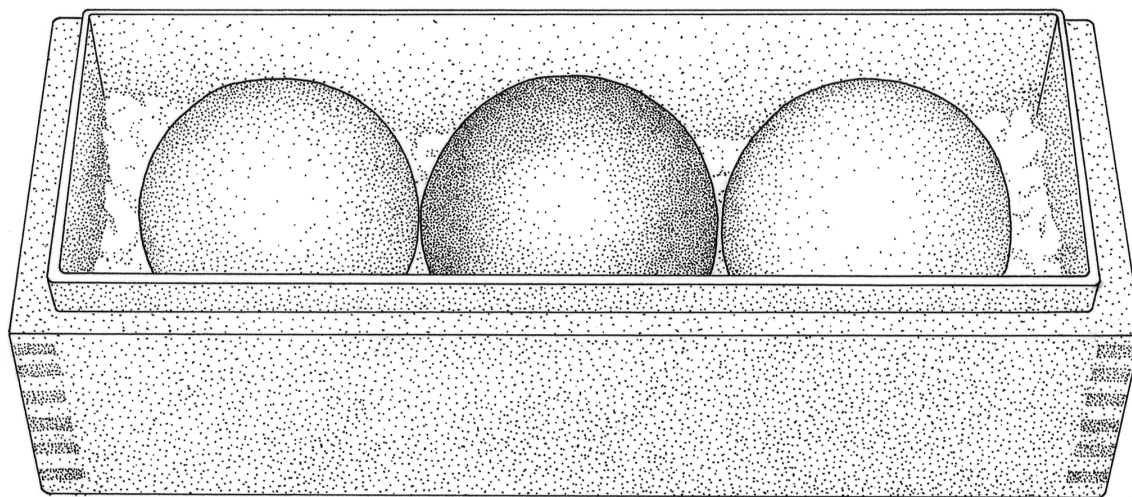
HOUSTON

Houston, Texas, is the fourth largest city in the USA with more than 2 million people living there. A total of 267 ivory items was found in 44 outlets. Thirty-four of those outlets were in eight antique markets similar to those seen in Dallas. Table 50 shows a breakdown of the types of outlets and numbers of ivory items seen in Houston.

Table 50
Types of retail outlets and number of ivory items surveyed in Houston, April 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	34	77	187	6
Antique shop	10	23	80	8
<u>Total</u>	<u>44</u>	<u>100</u>	<u>267</u>	<u>6</u>

The most common items were human figurines with 59 items (22%), followed in order by jewellery (21%), netsukes (15%), and crochet hooks/knitting needles (6% each) (see Table 51). Of the 227 items that could be attributed to place of origin, 109 (48%) were from China, 31 (14%) were from Europe, 27 (12%) were from the USA, 20 (9%) were East Asian, Africa and India had 13 apiece (6%), 12 (5%) were from Japan and one item each was from South East Asia and the Middle East.



Billiard balls, USA

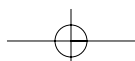


Table 51
Ivory items seen for retail sale in Houston, April 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Human figurine	59	22
Jewellery	56	21
(Bangle 0.5-1 cm)	14	5)
(Bangle 2 cm)	12	4)
(Bracelet with clasp)	3	1)
(Necklace, small beads)	3	1)
(Necklace, large beads)	7	3)
(Necklace, large beads with pendant)	1	<1)
(Pendant)	3	1)
(Brooch)	4	1)
(Earrings, pair)	3	1)
(Ring)	6	2)
Netsuke	41	15
Crochet hook/knitting needle	15	6
Animal figurine	12	5
Eating utensil handle	12	5
Cigarette holder	9	3
Carved tusk	6	2
Candlestick holder	4	1
Knife/dagger handle	4	1
Mask (small)	4	1
Serving knife handle	4	1
Paperknife	3	1
Snuff bottle	3	1
Raw tusk	2	1
Carved hollow tusk	2	1
Canton magic ball on pedestal	2	1
Fan	2	1
Dance card binder	2	1
Napkin ring	2	1
Screen	2	1
Misc.	21	8
Total	267	100

Recently-made (post-1989) ivory items in Houston

Of the 267 ivory items found, 111 (42%) looked old and could have been made before 1989 and 133 (50%) could have been made later. Twelve of the possibly post-1989 items were African, two were Indian and the rest were East Asian, probably from China, consisting of jewellery items, netsukes, figurines and tourist trinkets.

Antique markets in Houston

Eight markets with 38 outlets selling ivory were found (see Tables 52 and 53), two of which were in a town called Spring, several miles north of Houston. The investigator visited an International Gem & Jewellery Show held in Houston during the survey and found a Los Angeles dealer offering elephant ivory. The same woman had been seen earlier at another International Gem & Jewellery Show in Santa Monica (Los Angeles), California, and the ivory is reported in the Los Angeles section. Selling mammoth ivory was a San Francisco company with a factory in Fukien, China, that was also seen at the IG&JS in Santa Monica.



Table 52

Number of retail outlets in markets seen with ivory items in Houston, April 2006

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
Alameda Antique Mall	110	6	5
Antique Gallery	200	4	2
Antique Pavilion	60	5	8
Carolyn Thompson's Antique Center of Texas	190	5	3
Hart Antique & Design Center	40	6	15
Market Place Antiques	20	2	10
Southwest Antiques	40	2	5
Spring Antique Mall	35	4	11
<u>Total</u>	<u>695</u>	<u>34</u>	<u>5</u>

Table 53

Number of ivory items seen in Houston markets, April 2006

<i>Name of market</i>	<i>No. of items</i>
Alameda Antique Mall	29
Antique Gallery	13
Antique Pavilion	29
Carolyn Thompson's Antique Center of Texas	17
Hart Antique and Design Center	51
Market Place Antiques	16
Southwest Antiques	11
Spring Antique Mall	21
<u>Total</u>	<u>187</u>

Alameda Antique Mall

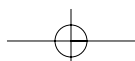
This large antique centre with about 110 dealers is on Alameda Genoa Road just off the Gulf Freeway (#45) on the southeast edge of the city. Six outlets offered 29 ivory items, including eight jewellery pieces, 11 figurines, an 18-cm African bust carved on a hollow tusk section (USD 325), a 22-cm Chinese bridge scene on a tusk (USD 375) and a 10-cm by 4-cm solid piece of tusk (USD 50).

Antique Gallery

This large market with about 200 dealers was in the town of Spring about 8 km north of Houston off Highway 45. Four outlets displayed 13 ivory items. Interesting pieces seen were a metal sheath holding a US naval dirk (knife) with an 11-cm-long ivory handle (USD 525), a metal-sheathed Middle Eastern dagger with a 7-cm ivory handle (USD 275), a carving knife and fork with 12-cm baby elephant tusk handles (USD 225) and a magnifying glass with a 14-cm ivory handle (USD 375).

Antique Pavilion

On Westheimer Road, this large market held about 60 outlets, five of which carried 29 ivory items. It also offered 14 mammoth ivory pieces, five scrimshawed whale teeth and some walrus ivory items. Fourteen of the ivory items were jewellery, including two Indian carved bracelets with metal clasps, three 4-cm wide African bangles with heads carved on them (USD 65 each) and two Chinese and one Burmese figurines. Two 8-cm high Victorian toothpick holders were priced at USD 995 each. A 32-cm long Indian dagger with a 9-cm ivory handle was priced at USD 495, and there was also an Indian ivory box with an elephant carved on the lid.





Carolyn Thompson's Antique Center of Texas

This well-known antique market consisted of about 190 dealers and was on the West Loop North Road. Five of the outlets displayed 17 ivory items, including seven African pieces: a 2-cm bangle (USD 129), a necklace with pendant (USD 165), a 62-cm carved tusk (USD 625), a 65-cm elephant bridge (USD 1,000), and two carved hollow tusk sections 18 and 22 cm high. The larger one was priced at USD 210. There were five Chinese figurines, a 15-cm Indian sadu (Holy man) figurine, a 17-cm Japanese figurine and one netsuke (USD 175). There was also a collection of very large Chinese painted bone objects (e.g. a junk and a palace with human figures).

Hart Antique & Design Center

This medium-size market with about 40 outlets was on South Voss Street between Westheimer Road and San Felipe Street. Six outlets had 51 ivory items. A significant item was a pair of raw tusks weighing 41.4 kg for the pair. The price marked was USD 23,795, but a vendor discounted it by 50% to USD 11,898, or USD 287/kg. The vendor did not know the tusks' history, but unless they were imported into the USA before the CITES Convention (1975), to sell them would be illegal. Many Japanese, Chinese and Indian ivory items were for sale. Netsukes, some signed by the craftsmen, were priced from USD 145 up to USD 1,400. Ivory snuff bottles were priced from USD 575 to USD 1,172. A 60-cm ivory and bone Japanese hara-kiri dagger and sheath cost USD 2,800.

Market Place Antiques

On Old Katy Road, this market contained about 20 outlets, with two of them selling 16 ivory items. There was one bangle, a 6-cm Chinese figurine, six butter knives with ivory handles and five 10-cm crochet hooks and knitting needles.

Southwest Antiques

This large market on Bissonet Street had more than 40 vendors. Two of them displayed 11 ivory items, consisting of three jewellery pieces, two Chinese figurines, three netsukes and 10 crochet hooks and knitting needles of 10-12 cm.

Spring Antique Mall

This market was also in the town of Spring. It had about 35 dealers with four of them selling 21 ivory items. The prices were quite low, with a 1-cm thick bangle going for USD 48, a 2-cm thick bangle for USD 59, a necklace made up of both small and large beads offered at USD 135 and two 5-cm pendants at USD 21 and USD 25. Two Chinese figurines, one 9-cm tall and the other 12-cm tall, were priced at only USD 65 each, and a poorly carved 25-cm Japanese figurine was USD 375.

Antique shops in Houston

The 10 antique shops contained 80 ivory items for sale. The most ivory pieces were found in the Center for Asian Antiques on Westheimer Road, owned by a Chinese man. Fourteen of the items were jewellery, 10 were human figurines from China, Japan and India, and three were small animal figurines. A 26-cm-high painted Japanese sumo wrestler weighing about 800 gm started at USD 4,500, but was reduced to USD 3,500. Surprisingly, a 10-cm physician's lady made of resin was selling as ivory, priced at USD 795. Perhaps the owner thought it was ivory. David Lackey Antiques was selling 12 netsukes for only USD 65 each. Richard's Antiquities had a 55-cm-long pair of Chinese-carved tusks priced at USD 3,500, along with two netsukes (USD 235 and USD 395), three small figurines and two bangles. One shop had a 6-cm Chinese name seal with a Fu dog carved on top priced at USD 300.

Retail prices in Houston

Table 54 shows the prices for various items seen in Houston.

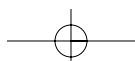


Table 54
Retail prices for ivory items seen in Houston, April 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	China	48
	2	China	59
	1	Africa	129
	2	?	250
	4	Africa	65
Brooch	4-6	China	55
Necklace, small beads		China	135
Necklace, large beads		China	165
Necklace, with pendant		Africa	165
Pendant	5	China	21-25
		India	135
Ring		China	20
FIGURINES			
Animal	7	China	75
	5	India	125
	17	China	145
Human	5-10	China	65-163
		Europe	1,500-2,200
		India	375
		Japan	115-600
	11-20	Africa	155-325
		China	65-1,195
	21-30	China	995
Netsuke	3-7	Japan	375-4,500
	5-6	East Asia	65-395
Noh mask	7	Japan	1,200-1,400
			3@895
TUSKS			
Carved	62-73	Africa	625-1,100
	22	China	375
	55	China	1,750
Carved, hollow section	21	Africa	210
Raw	140	Africa	11,898
MISC.			
Cigarette holder	16	China	95-99
Crochet hook/knitting needle	7-14	USA	14-28
Eating utensil handle	8-10	Europe	15
Knife/dagger handle	11	Europe	525
	7	Middle East	275
Magnifying glass handle	14	USA	375
Name seal	6	China	300
Napkin ring		Europe	235
Paperknife	13-14	?	35-45
	25	?	65
Serving utensil handle	12	Europe	225-475
Snuff bottle	6-9	China	575-1,172
Tusk fragment	10 x 4	?	50

GREATER PHOENIX

The greater Phoenix metropolitan area comprises the cities of Phoenix, Tempe, Mesa, Scottsdale and Glendale. It is in the state of Arizona and is the sixth largest population centre in the USA with about 1.4 million inhabitants. A total of 208 ivory items was found in 28 outlets. Fourteen of these were in seven antique markets similar to those described in the Dallas section. Table 55 shows a breakdown of the types of outlets and numbers of ivory items seen.

Table 55

Types of retail outlets and number of ivory items surveyed in Greater Phoenix, May 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	14	50	91	6
Antique shop	14	50	117	8
<u>Total</u>	<u>28</u>	<u>100</u>	<u>208</u>	<u>7</u>

The most common items were 43 human figurines, followed by netsukes, chess pieces, animal figurines, jewellery, and cigarette holders (see Table 56). Of the 118 items that could be attributed to place of origin, 74 (36%) were from East Asia, 16 (8%) were from each of China and Japan, 4 (2%) were from each of Africa and the USA, and one item was from each of Europe, India, Israel and South East Asia.

Table 56

Ivory items seen for retail sale in Greater Phoenix, May 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Human figurine	43	21
Netsuke	35	17
Chess piece	33	16
Animal figurine	20	10
Jewellery	20	10
(Bangle 0.5-1cm)	4	2)
(Bangle 2 cm)	2	1)
(Bracelet with clasp)	1	<1)
(Necklace, small beads)	1	<1)
(Necklace, large beads)	6	3)
(Necklace, large beads with pendant)	1	<1)
(Pendant)	4	2)
(Brooch)	1	<1)
Cigarette holder	9	4
Swivel stick	8	4
Paperknife	5	2
Chopsticks, pair	4	2
Snuff bottle	4	2
Inro	3	1
Eating utensil handle	2	1
Tusk hollow section	2	1
Picture frame	2	1
Serving utensil handle	1	<1
Tusk, raw tip	1	<1
Misc.	16	8
<u>Total</u>	<u>208</u>	<u>100</u>

Recently-made (post-1989) ivory items in Greater Phoenix

Of the 208 ivory items found, only 53 (25%) seemed genuinely old, while 106 (51%) could have been made after 1989. The remaining 49 (24%) could not be assigned an age. Of the possibly post-1989 items, three were African and the rest were probably Chinese, consisting of jewellery items, netsukes, figurines and trinkets.

Antique markets in Greater Phoenix

Seven markets with 14 outlets selling ivory were found (see Tables 57 and 58). Five of the markets were in Phoenix and two in Mesa.

Table 57

Number of retail outlets in markets seen with ivory items in Greater Phoenix, May 2006

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
Antique Gallery	35	4	11
Antique Plaza	200	3	2
Brass Armadillo	550	2	<1
Historic District Antiques	50	2	4
Stratford Court Antiques	20	1	5
Stuff Antiques	10	1	10
Treasures from the Past	40	1	3
Total	905	14	2

Table 58

Number of ivory items seen in Greater Phoenix markets, May 2006

<i>Name of market</i>	<i>No. of items</i>
Antique Gallery	74
Antique Plaza	7
Brass Armadillo	4
Historic District Antiques	3
Stratford Court Antiques	1
Stuff Antiques	1
Treasures from the Past	1
Total	91

Antique Gallery

This medium-size market of about 35 dealers was on North Central Avenue in Phoenix. Four dealers displayed a total of 74 ivory items, including a 4-cm Cambodian Buddha amulet in a bronze frame pendant (USD 95), several Japanese and Chinese figurines and netsukes, five animal figurines, three 12-14 cm engraved Japanese inros (USD 450 each), paperknives, cigarette holders, a Japanese cribbage set (USD 250), a chess set with 6-12 cm high pieces and a 40 x 40 cm ivory board (USD 9,000), and a 500 gm tusk tip (USD 95).

Antique Plaza

This very large market with more than 200 outlets was on W. Main Street in Mesa. Three of the outlets sold seven ivory items, consisting of a bead necklace (USD 65), two Chinese netsukes (USD 125 and USD 129.50), two 2-3 cm rabbits (USD 59.50) and two poor quality spoons (USD 9 each).

Brass Armadillo

On N. 28th Street in Phoenix, this market with about 550 dealers was the largest in the Phoenix area. However,



only two outlets displayed a total of four ivory items, including an 11-cm African bust (USD 119.95) and a small Indian elephant pendant (USD 24.99) that was identical to others seen elsewhere in the USA.

Historic District Antiques

This medium size market on West McDowell Road in Phoenix housed about 50 dealers, two of which sold only three miscellaneous ivory items.

Stratford Court Antiques

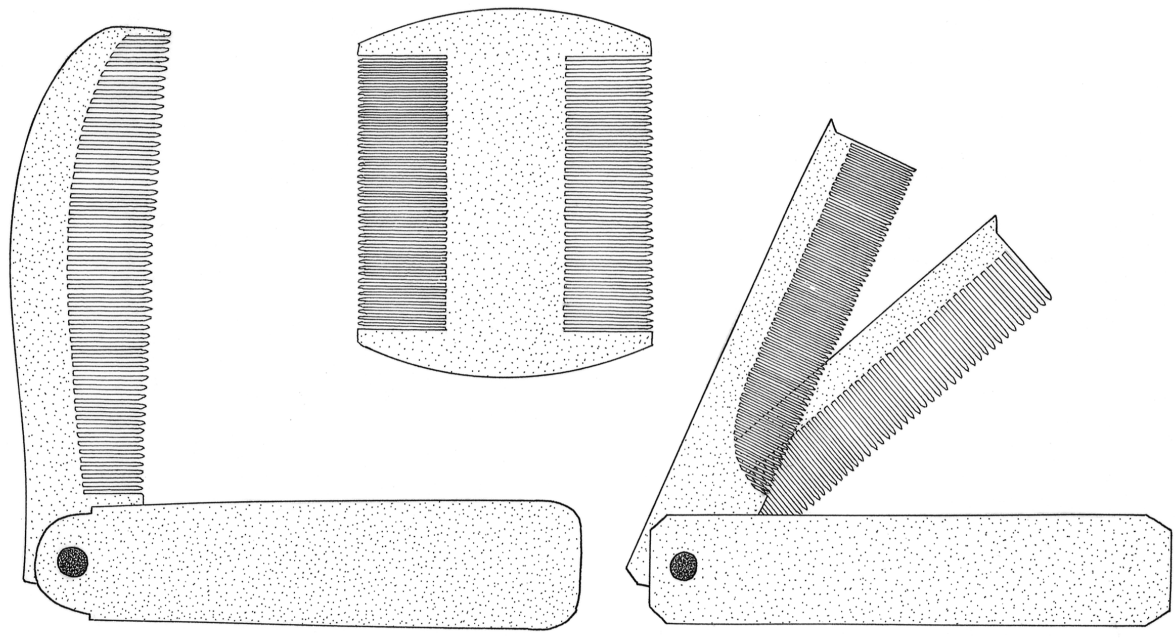
On East Cactus Street in Phoenix, this small market with about 20 outlets had one ivory and bronze item for sale, a 72-cm Art Deco female figurine priced at USD 7,881.

Stuff Antiques

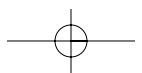
This small market with 10 dealers on North Central Avenue in Phoenix also had only one ivory item, a 5-cm Japanese erotic carving priced at USD 150. Another dealer in the shop said that he sold worked ivory on eBay. When asked where he obtained ivory, he replied simply that he found pieces ‘through connections’.

Treasures from the Past

This large market claimed to have more than 100 dealers when contacted by telephone, but had only about 40 displays when visited. The market was in Mesa on East McKellips Street. The only ivory item was a 14-cm cigarette holder costing USD 125. A Chinese scene carved on a mammoth tusk fragment was also found, priced at USD 5,200.



Combs, USA



Antique shops in Greater Phoenix

Most antique shops in the Phoenix area were found in Scottsdale (8), followed by Phoenix (3) and one each in Glendale, Mesa and Tempe. The only shop with more than 10 ivory items was Bradbury's, on North Scottsdale Road in Scottsdale. Bradbury's had 63 ivory items, including 20 Chinese and Japanese figurines (a 15-cm Japanese figurine was USD 750), 11 netsukes, five 5-7 cm animal figurines (USD 150 each), three pairs of chopsticks (USD 99 a pair) and other East Asian pieces. The Rare Lion in Tempe had a 4-cm thick African bangle (USD 225) and eight other low-priced ivory items: a 1-cm bangle (USD 20), two large bead necklaces (USD 20 and 65), one 18-cm Japanese figurine (USD 350), a netsuke (USD 65), a 13-cm cigarette holder (USD 35), a 7-cm snuff bottle (USD 85) and a pair of 18-cm chopsticks (USD 35). The owner said that ivory did not sell and he was trying to get rid of it. Another shop had a 14-cm physician's lady priced at USD 350.

Retail prices in Greater Phoenix

Table 59 shows the prices for various items seen in Phoenix. These were the lowest prices on average of the places surveyed in the USA.

Table 59
Retail prices for ivory items seen in Greater Phoenix, May 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	East Asia	20-45
	2-4	China	95-120
	4	Africa	225
Bracelet	2	?	65
Brooch	7	Israel	95
Necklace, small beads		China	65-95
Necklace, large beads		China	20-65
Pendant	5	SE Asia	95
FIGURINES			
Animal	6	Africa	85
	7	India	24.99
	5-9	?	15-150
Human	5-10	East Asia	65
		Japan	150
	11-20	Africa	119.95-145
		China	150-450
		Japan	350-750
Netsuke	72	USA	7,881
	4-7	East Asia	65-300
TUSKS, Raw, tip	16	Africa	95
MISC.			
Chopsticks, pair	18	East Asia	35-99
Cigarette holder	13-14	China	35-125
Paperknife	10-19	?	28-38
Snuff bottle	7	China	85-495

LAS VEGAS

Las Vegas, Nevada, is one of the fastest growing cities in the USA. The city proper has about 530,000 inhabitants, while the Las Vegas Valley holds 1.5 million people. A total of 212 ivory pieces was found in 21 outlets all but two in nine antique markets. The types of markets were as seen in Dallas and elsewhere in the American southwest, though in general smaller. Table 60 shows a breakdown of the types of outlets and numbers of ivory items seen in Las Vegas.

Table 60

Types of retail outlets and number of ivory items surveyed in Las Vegas, April 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	19	90	189	10
Antique shop	2	10	23	12
<u>Total</u>	<u>21</u>	<u>100</u>	<u>212</u>	<u>10</u>

The most numerous items were human figurines with 63 items (30%), followed by jewellery (22%), animal figurines (15%), knitting needles/crochet hooks (5%) and netsukes (4%) (see Table 61). Of the 123 items that could be attributed to place of origin, 49 (40%) were from East Asia, 46 (37%) were from China, 11 (9%) were from India, 10 (8%) were from the USA, 5 (4%) were African, 2 (2%) were Japanese and only one (1%) was from Europe.

Table 61

Ivory items seen for retail sale in Las Vegas, April 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Human figurine	63	30
Jewellery	47	22
(Bangle 0.5-1cm)	7	3)
(Bangle 2cm)	6	3)
(Necklace, small beads)	2	1)
(Necklace, large beads)	3	1)
(Pendant)	12	6)
(Brooch)	4	2)
(Earrings, pair)	4	2)
(Ring)	9	4)
Animal figurine	31	15
Crochet hook/knitting needle	10	5
Netsuke	9	4
Eating utensil handle	8	4
Box	7	3
Carved tusk	5	2
Paperknife	3	1
Cigarette holder	2	1
Fan	2	1
Misc.	25	12
<u>Total</u>	<u>212</u>	<u>100</u>

Recently-made (post-1989) ivory items in Las Vegas

Of the 212 ivory items seen, 77 (36%) appeared definitely old and 117 (55%) were the typical tourist trinkets one sees in Asia and Africa, though some of these looked as if they had seen some wear and tear and were counted as pre-1989. Of the possibly post-1989 ivory items, two were African, two Indian and the rest East Asian.

Antique markets in Las Vegas

Nine markets with 19 outlets selling ivory were found (see Tables 62 and 63). Most markets were in converted houses, but three were large commercial buildings.

Table 62

Number of retail outlets in markets seen with ivory items in Las Vegas, April 2006

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
Antiques at the Market	60	1	2
Antique Mall	40	1	3
Armstrong's Emporium	12	2	17
Funk House	20	6	30
Josette's	15	1	7
Nicholas & Osvaldo	11	4	36
Not Just Antiques	12	2	17
Red Rooster	30	1	3
Yester-Year Mart	24	1	4
<u>Total</u>	<u>224</u>	<u>19</u>	<u>8</u>

Table 63

Number of ivory items seen in Las Vegas markets, April 2006

<i>Name of market</i>	<i>No. of items</i>
Antiques at the Market	1
Antique Mall	3
Armstrong's Emporium	3
Funk House	52
Josette's	3
Nicholas & Osvaldo	89
Not Just Antiques	9
Red Rooster	5
Yester-Year Mart	24
<u>Total</u>	<u>189</u>

Antiques at the Market

On South Eastern Avenue, only one in this large market of about 60 outlets had ivory: a tiny bead necklace interspersed with wire, priced at USD 10.

Antique Mall

This medium-size market had about 40 dealers but only one displayed ivory, namely two 9- and 10-cm Chinese figurines, costing USD 145 each, and an old 9-cm cigarette holder (USD 19). The mall was on East Flamingo Road.

Armstrong's Emporium

This small market of a dozen dealers on South Main Street had two outlets that offered three ivory pieces: two 8-cm Indian figurines (USD 100 for both) and a 6-cm Chinese figurine (USD 50).



Funk House

On South Casino Street, this small market of about 20 outlets had six dealers selling a total of 52 ivory items, including 16 jewellery pieces, nine Chinese figurines, eight netsukes (USD 200-250 each), some animal carvings (a 12-cm rhino was USD 195) and other items.

Josette's

In this small market of 15 dealers on East Charleston Boulevard, only one outlet was selling three ivory pieces, a pair of earrings and two brooches.

Nicholas & Osvaldo

Also on East Charleston Boulevard, this small but eclectic market with 10 dealers offered the most ivory of any place in Las Vegas. Four outlets had 89 ivory items, including 17 jewellery pieces, 17 Chinese figurines ranging from 5-cm to 20-cm tall (a 16-cm physician's lady was USD 750), 15 animal carvings, two poor-quality African elephant bridges on tusks (USD 200 for a 16-cm one and USD 300 for a 25-cm one), 10 knitting needles and crochet hooks, and miscellaneous items.

Not Just Antiques

Two of 12 outlets offered nine ivory items. On Western Avenue, the market had four Chinese figurines (a poor 7-cm one was USD 40, while a better 24-cm one on an ivory base was USD 495), three animal figurines (a 7-cm lion was USD 35) and a 13-cm cigarette holder (USD 50).

Red Rooster

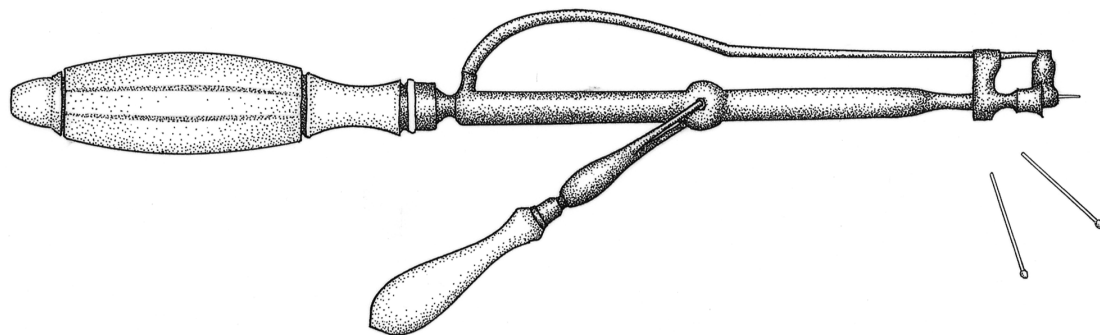
On the corner of Western Avenue and East Charleston Boulevard, this old, rambling market of about 30 dealers had only one outlet selling five ivory items. Four were 5-8 cm pendants priced at USD 95-120 and the other was an 8-cm butterfly brooch priced at USD 55.

Yester-Year Mart

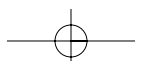
This small market of about 10 dealers on East Charleston Boulevard had one outlet that was selling 24 ivory items. Interesting pieces were a 7-cm Indian figurine (USD 150), a poor quality 17-cm European figurine (USD 395), a pair of 14-cm Indian carved tusks (USD 400) and a 4-cm Indian rider on a camel.

Antique shops in Las Vegas

The two antique shops found had only 23 ivory items. Near each other on East Charleston Boulevard, one had 18 ivory items and the other five. The former had a ring (USD 15), two 8-cm Chinese figurines (USD 75 each), three Japanese figurines (a 16-cm one of mediocre quality was USD 1,695), a 40-cm damaged African elephant bridge (USD 395), a 12-cm opium pipe (USD 395) and other pieces. The latter had two jewellery items and three 4-6-cm Chinese figurines.



Dental drill, USA, the 1880s



Retail prices in Las Vegas

Table 64 shows the prices for various items seen in Las Vegas.

Table 64

Retail prices for ivory items seen in Las Vegas, April 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	China	20-95
	2	East Asia	30-75
Brooch	4-8	?	8-85
Necklace, small beads		China	85
Necklace, large beads		China	195
Pendant	5-8	?	95-120
Ring		China	15
		?	48-49
FIGURINES			
Animal	5-7	?	35-110
	7	India	150
	12	?	195
Human	5-10	?	24-40
		China	40-275
		India	50-250
	11-20	Europe	395
		China	135-750
		Japan	1,695
Netsuke	21-30	China	495
	3-7	East Asia	85-250
TUSKS			
Carved	16-40	Africa	200-395
	14	India	200
MISC.			
Box	7-10	?	250-395
Cigarette holder	9-13	China	19-50
Crochet hook/knitting needle	10	USA	21-22
Fan		?	48.50-87.50
Paperknife	15-20	?	65-275



SAN FRANCISCO BAY AREA

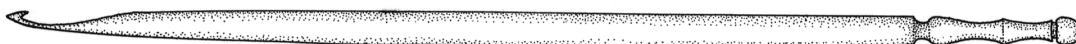
San Francisco, California, is the 14th largest city in the USA with a population of about 750,000 people, but another half a million people live in East and South Bay nearby. A total of 2,587 ivory items was found in 45 outlets in San Francisco. Two of the outlets were in Sausalito, north of the city proper across the Golden Gate Bridge. A further four outlets with 190 ivory items were found in East Bay (Oakland/Berkeley), making a total of 49 outlets with 2,777 items for the Bay Area (see Table 65). The survey of East Bay was incomplete due to time and financial constraints. The Bay Area was unusual in that no market was found with ivory. Tourist markets exist, particularly in the Fisherman’s Wharf area, but none sold ivory. Two antique markets elsewhere in the city were visited and again no ivory was found. All ivory was sold in antique shops, which includes jewellery and tourist souvenir shops.

The analysis was applied to the San Francisco Bay Area as a whole. The most numerous items were jewellery with 998 items (36%) followed in order by human figurines (21%), chess pieces (15%), netsukes (8%), and mahjong pieces (5%) (see Table 66). Of the 2,504 pieces that could be attributed to place of origin, 2,308 (92%) were from China, 78 (3%) were from the USA, 56 (2%) were from East Asia, 40 (1%) were from Europe, and all with less than 1% were from Japan (17), India (4), Africa (2) and Brazil (1).

Table 65

Types of retail outlets and number of ivory items surveyed in San Francisco Bay Area, May 2006

<i>Type</i>	<i>No. of outlets</i>	<i>% of total with ivory</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique shops	49	100	2,777	57



Crochet hooks, USA

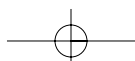


Table 66

Ivory items seen for retail sale in San Francisco Bay Area, May 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Jewellery	998	36
(Bangle 0.5-1cm	61	2)
(Bangle 2cm	59	2)
(Bangle 3cm	9	<1)
(Bracelet with clasp	2	<1)
(Necklace, small beads	116	4)
(Necklace, large beads	124	4)
(Pendant	248	9)
(Brooch	53	2)
(Earrings, pair	262	9)
(Ring	64	2)
Human figurine	573	21
Chess piece	416	15
Netsuke	215	8
Mahjong piece	144	5
Animal figurine	93	3
Carved tusk	51	2
Cigarette holder	41	1
Snuff bottle	29	1
Canton magic ball	28	1
Carved plaque	24	1
Chopsticks, pair	23	1
Name seal	18	1
Box	15	1
Paperknife	8	<1
Polished Tusk	8	<1
Walking stick handle	8	<1
Boat, Chinese	7	<1
Napkin ring	7	<1
Eating utensil handle	6	<1
Serving utensil handle	6	<1
Hollow tusk section	5	<1
Brush	4	<1
Pipe	4	<1
Candlestick holder	2	<1
Painted tusk	2	<1
Misc.	42	2
<u>Total</u>	<u>2,777</u>	<u>100</u>

Recently-made (post-1989) ivory items in San Francisco Bay Area

The large number of items in San Francisco, particularly in China Town, made estimating their age particularly difficult. The shopkeepers invariably said that they were selling old stocks imported before 1989. However, in a study conducted in 2002, the Humane Society of the United States (HSUS 2002) found one shop in San Francisco that had a sister ivory shop in Hong Kong and an ivory carving factory in Guangdong Province, China. HSUS discovered that individuals were smuggling worked ivory from Hong Kong and China into San Francisco in their baggage. As interviewees were aware of CITES and US regulations and did not want to incriminate themselves, the investigator could not learn whether this practice continues although he believes he spoke with the same shop owner that the HSUS interviewed. This man said that the ivory carving factory in Guangdong Province was now closed, but they still owned an ivory shop in Hong Kong. The fact that this family owned two shops in San Francisco that still displayed more than 1,700 ivory items in May 2006, sixteen years after the import ban, would

suggest continued replenishment from China/Hong Kong.

Only 251 (9%) of the 2,777 ivory items found in San Francisco Bay Area could be confidently assigned an age of pre-1989. Probably several hundred of the ivory items seen in China Town were also pre-1989 in age, but there was no way to determine this. Also, some of the ivory items made after 1989 could have been legal if they were made by craftsmen in the USA who were using legal raw ivory.

Antique shops in San Francisco Bay Area

The largest concentration of worked ivory (2,298 items) was found in the China Town area on Grant Street or on side streets off Grant Street. About 4,500 items of worked mammoth ivory were also seen. Ten of 15 shops carrying ivory were Chinese owned. Three of these were jewellery shops with 137 ivory items. One of these sold only five bangles in the jewellery category, the rest of the ivory items being 16 figurines, 27 netsukes, two carved plaques, three snuff bottles and miscellaneous pieces. All were made in China, except two 8- and 10-cm Indian figurines priced at USD 180 and USD 300 respectively. Another jewellery shop had one ivory bracelet 2-cm wide with a turquoise stone (USD 88), 28 pairs of earrings and 35 3-6 cm elephant pendants adorned with gold-coloured metal (USD 16-25). This type of elephant pendant was also seen in Texas. The third jewellery shop had two 1-cm bangles and 10 thin, 5- to 10-cm Chinese figurines.

Two Chinese shops were ivory specialty outlets owned by relatives of the same family. The man who started the first came from Hong Kong in the 1950s. His eldest son opened the second ivory shop just a few doors down from the first, but later died. According to the first shop owner, before the CITES ivory trade ban a Guangzhou factory supplied them, but since 1989 they had been selling pre-ban stock. He was the grandson of the original owner and was 41 years old at the time of the interview in May 2006. He was born in Hong Kong, but moved to San Francisco at the age of nine. His shop had 886 ivory items and his uncle's shop had 852. Both shops also sold many mammoth, hippo and warthog ivory and camel bone carvings. Signs in the shops claimed that they complied with CITES and that they sold only legal ivory. The two shops displayed all the types of ivory items found in China or Hong Kong, including large carved tusks, elaborate composite pieces and high quality sculptures. A pair of 1.2-m carved tusks was priced at USD 49,950, a 26-layer Canton magic ball on a 58-cm pedestal was USD 50,000, Chinese and Japanese netsukes ranged from USD 120-1,200, and snuff bottles ranged from USD 495-795. Overall, the quality of the items was quite high.

The remaining Chinese-owned shops were large outlets carrying a variety of tourist souvenirs with names like Canton Bazaar, Peking Bazaar and Shanghai Bazaar. Only the Peking Bazaar carried a significant amount of ivory, 134 pieces, made up of 63 small pendants, 48 5-30 cm Chinese figurines (a 12-cm lady was USD 495), seven animal carvings (a 13-cm fat elephant was USD 395), two 22-cm boats, a man pulling a cart, four pipes and three cigarette holders and a 42-cm incense burner. In the display were also two unfinished carved tusks and four unfinished Canton magic balls. Another shop had a 1.7 m pair of carved tusks priced at USD 95,000.

A Chinese-owned jewellery shop that sold ivory was found outside China Town. It had an English name and offered 58 ivory bead necklaces, 15 pendants and hundreds of ivory beads (not counted in the total of ivory items). One other Chinese-owned outlet was found in the Yellow Pages. It had no showroom and visits to the owner were by appointment. Speaking by telephone, the investigator found that 30 Chinese antique ivory items were for sale, consisting of five netsukes, 21 figurines 5-30 cm tall, three animal figurines, and one 28-cm carved tusk.

The other five shops in China Town were a chain started by an Italian-Israeli man, now deceased. Informants said that his grandson now owned the shops but wanted to sell out, which explained the 50-80% discounts. The shops sold gaudy 'antiques' and home decorations and the street windows of all carried large 'Sale' signs. The vendors were all aggressive and tried to press sales. Most of the ivory sold in these shops was mammoth, mainly netsukes, but also large, carved tusks and figurines. Only 186 items were made of elephant ivory, and more than 2,800 were mammoth ivory, though some vendors tried to pass off mammoth as elephant ivory. Seven of the items were reproductions of Art Deco figurines made by Dimitri Chiparus, which included his forged signature on the stone bases. Starting prices of these items were quite high, ranging from USD 4,000 to USD 8,000, but moderate bargaining would bring these down to USD 1,500 to USD 2,800, which was less than the prices on two Web sites found selling comparable figurines. Discounts on other types were also high. For example, a 42-cm Chinese Long Life figurine started at USD 16,000 and after a few minutes of bargaining reduced to USD 4,000. The biggest discount obtained was for a 16-cm Kwan Yin figurine that came down from USD 7,000 to USD 400, a 94% reduction in price! The Hispanic vendor said that the owner just wanted to sell everything as quickly as possible. A 1.3-m Kwan Yin carved on a tusk was the most expensive piece with a starting price of USD 164,000; it could probably be purchased for USD 30,000-35,000.

Four other shops of the Italian-Israeli type were found on or near Fisherman's Wharf. All sold mammoth ivory and camel bone carvings, but only two also sold elephant ivory. One offered two ivory 14-cm Chinese figurines and four Art Deco figurines. The other had one Chinese figurine and 10 Chiparus reproduction figurines,



18-36 cm high, some with multiple figures on one stone base. The vendor said that they were actual Chiparus works and that he could sell them for USD 15,000 each, but that he needed cash. One, priced at USD 6,500, fell to USD 2,500 with a little bargaining. He made the mistake of showing the investigator an auction house catalogue with photographs of similar figurines that suggested bidding prices of USD 2,000 to USD 5,000, which stated clearly that they were reproductions. The vendor claimed that his shop was not owned by the Italian-Israeli owner of the other similar style shops, but another man at a desk speaking Hebrew on the telephone suggested an Israeli connection. A similar style shop nearby that did not sell elephant ivory, but had mammoth ivory and bone carvings, also had employees speaking Hebrew.

The remaining antique shops were scattered around the city and only one had more than 20 ivory items for sale. An antique shop on Jackson Square offered 21 ivory pieces of which eight were a set of 8-cm German musicians (USD 11,000). A 6-cm Japanese netsuke was priced at USD 5,500, but the owner said that he would reduce it to USD 4,400 as a 'collector's net'. Other items were a pair of 1.2-m carved tusks (Long Life and Kwan Yin) priced at USD 35,000, a 1.6 m polished tusk (USD 18,000), a 75-cm Chinese carved tusk and eight walking sticks with ivory pommels. Interesting pieces in other shops were an Indian secretary desk with ivory inlay for USD 84,000, an Indian camphor and ivory table for USD 18,750, four cricket cages made of ivory and bamboo (USD 600-1,400), a 92-cm African carved tusk (USD 2,500), a 27-cm French carving of Jesus on a wooden cross (USD 11,000), a 12-cm bust of a Roman emperor on a 14-cm wooden pedestal (USD 7,500) and, finally, a genuine 37-cm Chiparus Art Deco bronze and ivory figurine (USD 33,000).

The two shops in Sausalito were a Japanese antique outlet and a gallery that sold ivory jewellery and scrimshawed items. The Japanese shop had six ivory items, including a 17-cm figurine (USD 5,975), two Edo period 8- and 9-cm netsukes (USD 1,600 each), a bamboo root inro with a 5-cm ivory netsuke (USD 1,975), a lacquer inro with a 5-cm ivory netsuke (USD 3,700) and a 12- x 7-cm carved box (USD 1,950). Most of the scrimshaw pieces in the gallery consisted of mammoth or walrus ivory and whale teeth, but 53 items were elephant ivory. These were 32 jewellery pieces (earrings USD 80-125/pair, 2-4 cm pendants USD 76-148), a Damascus knife with an 8-cm scrimshawed ivory handle (USD 850), three scrimshawed billiard balls on stands (USD 1,275-1,975), three antique hairbrushes, one of which was Victorian English (USD 1,250), carved plaques and other objects. A raw 10-cm tusk tip weighing perhaps 250 gm was priced at USD 325 (USD 1,300/kg). American craftsmen made all but one.

One East Bay shop in Berkeley specialized in East Asian Buddhist antiques, especially netsukes. It had 159 ivory items, all Chinese or Japanese figurines and netsukes. A Web site offered the same items and contained detailed descriptions. A 14-cm Japanese figurine of Kannon riding an elephant was priced at USD 700, a 6.5 cm netsuke cost USD 1,500 and a 3-cm Canton magic ball on a 20-cm pedestal was priced at USD 500. The shop guaranteed all items as genuine antiques. Another antique shop in Oakland carried 21 ivory items, including eight jewellery pieces, three Chinese figurines, five netsukes, a 34-cm Chinese-carved tusk, a paperknife, a cigarette holder and a napkin ring. Another Oakland shop had seven ivory pieces: five 5-20 cm figurines and two netsukes. The last shop in East Bay had three ivory items, a 29-cm Chinese lady (USD 1,000), a 20-cm Japanese lady (USD 900) and a 5-cm Japanese netsuke (USD 1,000).

Retail prices in San Francisco Bay Area

Table 67 shows the prices for various items seen in San Francisco.

Table 67
Retail prices for ivory items seen in San Francisco Bay Area, May 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	China	79-95
	2	China	180
Brooch	4-6	China	25-89
	5	USA	110
Necklace, small beads		China	95-125
Necklace, large beads		China	190-250
Pendant	2-7	China	16-125
	2-4	USA	76-148
Ring		China	20-55
Beads	2		40

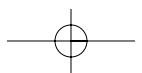


Table 67 continued

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
	1.5		28
	1		18
	0.5		10
FIGURINES			
Animal	5-10	China	99-350
	11-20	China	395-1,250
Human	5-10	Brazil	1,500
		China	125-350
		Europe	1,375
		India	180-350
		Japan	5,500
	11-20	China	180-18,000
		Europe	7,500
		Japan	1,000-9,000
	21-30	China	1,000-6,200
		Europe	11,000-18,000
		USA	4,000-6,500
	31-40	USA	6,000-8,000
		Europe	33,000
	41-50	China	7,000-16,000
	51-60	China	32,500
	61-90	China	4,200-33,000
	130	China	82,000
Netsuke	3-7	China	120-1,200
	5-9	Japan	695-4,500
TUSKS			
Carved	92	Africa	2,500
	10-20	China	295-999
	21-30	China	750
	50-90	China	5,000-33,000
	120-170	China	17,500-48,000
Polished	105	China	8,950
	150-160	China	18,000-27,500
Carved, hollow section	21	China	1,250
Raw (tip)	10	Africa	325
MISC.			
Box	4-7 x 6-9	China	395-695
	12 x 7	Japan	1,950
Cigarette holder	9-12	China	45-70
Chess set (32pcs+board)	5-10	China	16,000
Chopsticks, pair	19	China	99
Knife/dagger handle	8	USA	850
Canton magic ball	21-29	China	1,100-12,000
	70	China	50,000
Napkin ring		Europe	50
Paperknife	10-15	China	100-125
Name seal	4-7	China	225-330
Serving utensil handle	12	Europe	225-475
Snuff bottle	8	China	495-795



GREATER LOS ANGELES

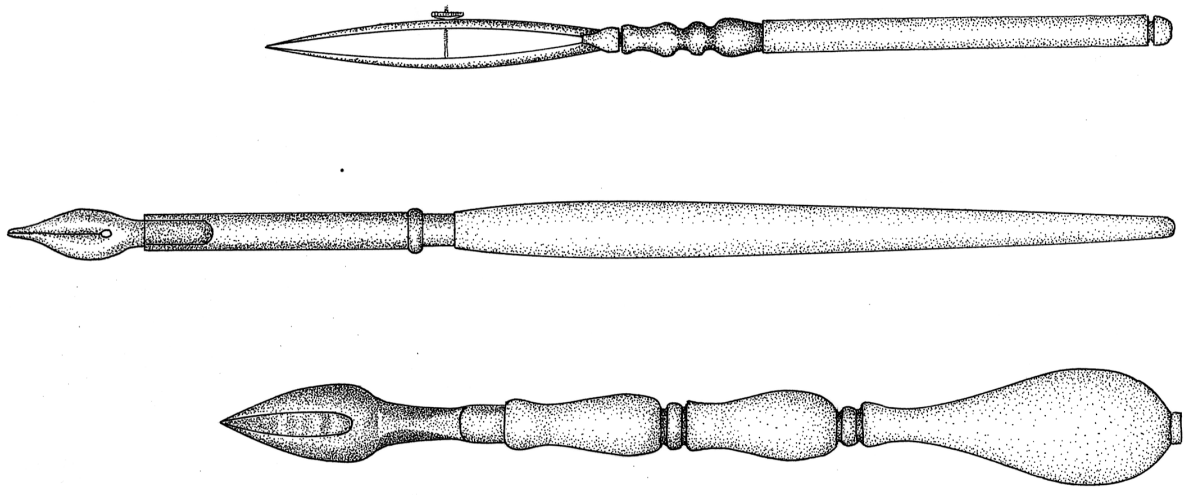
Los Angeles in southern California is the second most populous city in the USA with more than 4 million inhabitants and another 3 million living nearby. The conglomeration extends about 80 km east-west and 65 km north-south. Three main areas were surveyed: the city proper, Pasadena and the San Gabriel Valley to the east. Los Angeles city, including Beverly Hills and Santa Monica, contained 102 ivory outlets with 2,277 ivory items, Pasadena contained 49 ivory outlets with 246 items and the San Gabriel Valley had 19 ivory outlets with 82 items.

A total of 2,605 ivory items was found in 170 outlets in the Los Angeles area. In the city, 66 outlets were found in six markets, Pasadena had 17 outlets in eight markets and the San Gabriel Valley had 45 outlets in six markets. The 42 other ivory outlets were antique shops. Table 68 presents a consolidated breakdown of the types of outlets and number of ivory items found.

Table 68
Types of retail outlets and number of ivory items surveyed in Greater Los Angeles, March-May 2006 and March-May 2007

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	128	75	1,585	12
Antique shop	42	25	1,020	24
<u>Total</u>	<u>170</u>	<u>100</u>	<u>2,605</u>	<u>15</u>

Most frequently seen were jewellery pieces with 55% of the total, followed in order by human figurines (13%), netsukes (10%), animal figurines (4%) and ivory handles on knives or utensils (2%). All other categories were 1% or less (see Table 69). Of the 1,942 items that could be attributed to place of manufacture, 1,652 (85%) were made in China, 116 (6%) in the USA, 106 (5%) were Japanese, 45 (2%) European, 16 (1%) African, five Indian and two South East Asian.



Pens, USA

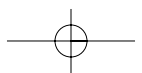


Table 69

Ivory items seen for retail sale in Greater Los Angeles, March-May 2006 and March-May 2007

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Jewellery	1,424	55
(Bangle 0.5-1cm	136	5)
(Bangle 2cm	27	1)
(Bangle 2-4cm	8	<1)
(Bracelet	16	1)
(Beads	159	6)
(Necklace, small beads	501	19)
(Necklace, small beads with pendant	5	<1)
(Necklace, large beads	75	3)
(Necklace, large beads with pendant	3	<1)
(Necklace, other	100	<1)
(Pendant	238	9)
(Brooch	46	2)
(Earrings, pair	165	6)
(Ring	35	1)
Human figurine	338	13
Netsuke	268	10
Animal figurine	96	4
Utensil/knife handle	62	2
Cigarette holder	39	1
Napkin ring	34	1
Chess piece	32	1
Container	29	1
Carved tusk	22	1
Snuff bottle	21	1
Chopsticks, pair	20	1
Paperknife	18	1
Carved panel/screen	15	1
Noh mask	13	<1
Name seal	13	<1
Canton magic ball on pedestal	11	<1
Carved hollow tusk	11	<1
Knitting needle/crochet hook	9	<1
Cane/walking stick handle	8	<1
Pagoda	6	<1
Fan	5	<1
Magnifying glass handle	5	<1
Misc.	106	4
<u>Total</u>	<u>2,605</u>	<u>100</u>

Recently-made (post-1989) ivory items in Greater Los Angeles

Of the 2,605 ivory items found in the Los Angeles area, only 531 (20%) looked definitely older than 1989 in age. Some 1,782 (68%) might have been manufactured after 1989, particularly 981 ivory jewellery pieces and small figurines seen at the International Gem & Jewellery Show, and another 500+ items seen in China Town. Three African items, two from South East Asia and one Indian piece could have been recently made, while the remainder were East Asian.

Antique markets in Greater Los Angeles

Twenty markets with 128 outlets selling ivory were found in the area. There were periodic open-air markets, special fairs or shows, and the more common large building holding several outlets selling items usually on consignment (see Tables 70 and 71).

Table 70

Number of retail outlets in markets seen with ivory items in Greater Los Angeles, March-May 2006 and March-May 2007

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
Antique Avenue	40	1	3
Antiques & Appraisals	12	2	17
Claremont Collection	20	2	10
The Collection	32	5	16
Dovetail Antiques	26	3	12
Heart of the Village	12	1	8
International Gem & Jewellery Show	250	2	1
Kaleidoscope	25	4	16
King Richard's Antique Center	250	6	2
Long Beach Antique Mall	35	3	9
Long Beach Antique Market	600	43	7
Novotny's Antiques	25	5	20
Old Covina Antique Emporium	150	3	2
Pasadena Antique Center & Annex	130	6	5
Pasadena Antique Mall	50	3	2
Pasadena Flea Market	>1,000	26	2
Patty's Antiques	75	1	1
Pomona Antique Center	50	2	4
Pomona Antiques Faire	50	3	6
Santa Monica Airport Antique & Collectibles Market	50	7	14
<u>Total</u>	<u>>2,882</u>	<u>128</u>	<u>4</u>

Table 71

Number of ivory items seen in Greater Los Angeles markets, March-May 2006 and March-May 2007

<i>Name of market</i>	<i>No. of items</i>
Antique Avenue	1
Antiques & Appraisals	8
Claremont Collection	13
The Collection	21
Dovetail Antiques	9
Heart of the Village	1
International Gem & Jewellery Show	981
Kaleidoscope	17
King Richard's Antique Center	29
Long Beach Antique Mall	5
Long Beach Antique Market	225
Novotny's Antiques	4
Pasadena Antique Center & Annex	59
Pasadena Antique Mall	17
Pasadena Flea Market	85
Patty's Antiques	1
Pomona Antique Center	3
Pomona Antiques Faire	37
Santa Monica Airport Antique & Collectibles Market	29
<u>Total</u>	<u>1,585</u>



Antique Avenue

This medium-size market was on 2nd Street on Pomona's Antique Row, a stretch of approximately 100 metres in downtown Pomona that contained about a dozen antique markets. Only one small bead necklace was found in one outlet in this market.

Antiques & Appraisals

This small market in Pasadena had 12 outlets two of which offered eight ivory items. One outlet displayed a set of 2-cm musician figurines on beer barrels made in Germany. The other had a baby's wrist rattle.

Claremont Collection

In the San Gabriel Valley, on Claremont's West Bonita Avenue, this market had 13 ivory items in two of its 20 outlets. One offered a set of 12 knives and forks with 8-cm ivory handles (USD 132), and the other carried a serving fork with a 14-cm ivory handle.

The Collection

On 3rd Street in west Los Angeles, this fashionable antique market of 32 outlets sold generally high quality items. Five outlets offered 21 ivory items, including 12 jewellery pieces, two containers, two 9-cm vases, a 10-cm carved cantaloupe on a base (USD 550), a cross with a cherub carved on it, and two hairbrushes, one with a matching mirror.

Dovetail Antiques

Most items in this market of 26 outlets on West California Street in Pasadena were recently manufactured home decorations. Three dealers sold ivory. One piece was a recently-made supposedly Japanese netsuke (USD 85), almost certainly made in China. Another outlet had a 10-cm long canoe with a small figure in it, and the third outlet displayed a seven-piece set of mini-furniture made in England. The mini-furniture had been there for at least one year, as it was seen in April 2006 and April 2007.

Heart of the Village

This small market on West Bonita Avenue in San Dimas carried one 5-cm elephant pendant, made in Thailand. This section of West Bonita Avenue, which makes up downtown San Dimas, contained seven antique markets. Only this one sold ivory.

International Gem & Jewellery Show

About 250 gem, jewellery and crafts dealers displayed at this large show, held every year at the Santa Monica Civic Auditorium. One woman vendor based in Simi Valley, Southern California, displayed 244 ivory items, consisting of jewellery pieces, beads of various sizes, 5-6 cm Japanese figurines and netsukes (USD 225-295), small animal figurines and Noh masks and a 13-cm painted cigarette holder. She also had 18 mammoth ivory pieces. She displayed at the IG&JS in Houston in May 2006. The other ivory outlet, with two Chinese dealers, was a jewellery wholesaler with 737 ivory items, made up mainly of small and large bead necklaces, pendants, earrings and bangles. The company was based in Chino Hills, California, in San Bernardino County just east of Los Angeles County. The ivory looked new, though a vendor said that it came from old stock imported 'many years ago'. A third outlet, with shops in San Francisco, Hong Kong and China, displayed about 1,000 mammoth ivory items.

Kaleidoscope

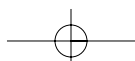
This medium-size market was on South Myrtle Street in Monrovia. Four of 25 outlets offered 17 ivory items, including a 4-cm rose pendant from England (USD 58), a 5-cm cross pendant, an 8-cm cigarette holder (USD 25), a 16-cm paperknife from Africa (USD 85) and a set of 12 knives and forks with ivory handles (USD 125).

King Richard's Antique Center

This three-storey building in Whittier on the east side of LA is one of the largest permanent antique markets in the Los Angeles area. Six of the outlets displayed 29 ivory items, including 14 ivory jewellery pieces, an 8-cm European figurine, three poor quality Chinese figurines (a 13-cm lady for USD 249), a photo frame, a 16-cm paperknife (USD 99) and other items.

Long Beach Antique Mall

On Pacific Coast Highway in Long Beach, this old market sells low quality second-hand goods and collectibles. Three outlets displayed five ivory items, consisting of a bracelet made of ivory plaques (USD 95), a ring with a 5-





cm plaque with a Japanese face painted on it (USD 325), a pair of earrings (USD 40), a 6-cm netsuke pendant (USD 125) and a thin 5-cm African bust made as a brooch.

Long Beach Antique Market

This outdoor flea market is normally held on the third Sunday of the month, though the one surveyed was on a fifth Sunday in April 2006. About 600 dealers displayed their goods in the parking lot of the Long Beach Veterans Stadium. Forty-three dealers offered a total of 225 ivory items, including 124 jewellery pieces, 27 human figurines from China, Japan, Africa and Europe, two netsukes, 10 animal figurines, two carved tusks from China and one from Africa, a 5-cm Chinese name seal with a human head carved on top (USD 40), a 13-cm glove stretcher and many other items. One dealer had a table with 25 ivory items, including eight Chinese human figurines, four animal figurines, an elephant bridge carved tusk, six napkin rings and several hairbrushes. Other stalls displayed 21 scrimshaw pieces on whale teeth or walrus tusks, a whole, mounted polished walrus tusk, many carved bone items (jewellery and small figurines), but no mammoth ivory. Five outlets manned by African traders were selling African carvings, jewellery, textiles and so on, but nothing was of ivory.

Novotny's Antiques

For its size, this 25-outlet market on North Lake Street in Pasadena had a fair amount of ivory for sale. Four of the pieces were jewellery, 11 were 2-5 cm Noh masks, two were netsukes, eight were human figurines (including two 16-cm crucifixes on wooden crosses, USD 2,295 for one), and three were animal figurines. Other ivory items consisted of a 14-cm long pair of opera glasses (USD 250), a magnifying glass with an 11-cm ivory handle (USD 195) and a mini-parasol with an 8-cm ivory handle (USD 145).

Old Covina Antique Emporium

This very large market was in Covina to the east of Los Angeles on North Citrus Avenue. Only three of about 150 outlets sold ivory, namely a 1-cm bangle, a 6-cm animal figurine, a carved brush pot and a 15-cm paperknife.

Pasadena Antique Center & Annex

These two markets with a total of about 130 outlets were near each other on South Fair Oaks Avenue in Pasadena. Six outlets offered 59 ivory items, unusually with only two of them being jewellery, namely large bead necklaces (USD 165 and 185). Eight of nine of the human figurines were East Asian (a 20-cm Chinese physician's lady was USD 1,200), one 13-cm figurine was European, there were 28 netsukes (USD 375-825), six animal figurines (a 55-cm Japanese dragon was USD 2,500), a 25-cm high European vase with ivory flowers (USD 475), a two-piece sterling silver fish serving set with 12-cm ivory handles (USD 550), four European canes and walking sticks with ivory handles, and other items. There were also pieces made of walrus ivory and bone, but no mammoth ivory.

Pasadena Antique Mall

On South Raymond Avenue in Pasadena, this large market had only three outlets that offered 17 ivory items. All but three were jewellery, including a bracelet of 4-cm square ivory plaques (USD 98), four small bead necklaces (USD 125-129) and a large bead necklace with a 6-cm Chinese snuff bottle pendant (USD 595). The remaining three were a 5-7 cm snuff spoon, funnel and dish set in a satin-lined box (USD 295).

Pasadena Flea Market

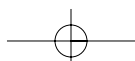
This huge market held in the parking area of the Rose Bowl stadium in Pasadena advertises itself as the 'world's largest flea market'. On the second Sunday of every month usually well over a thousand dealers from all over southern California display their wares. On the day of the survey, 26 outlets displayed 85 ivory items, mostly jewellery (64 pieces). Six of the pieces were low quality East Asian human figurines. There was a pair of 6-cm erotic netsukes that 'fit together' priced at USD 100. There were eight animal figurines (one a 7-cm bejewelled Indian elephant), a 16-cm high by 7-cm diameter Chinese box (USD 225), and a few miscellaneous items. Several items were made of whale teeth, walrus ivory, bone and synthetic materials. Four outlets had African vendors selling masks, figurines, jewellery, etc., but no ivory.

Patty's Antiques

This large, two-storey market on South Myrtle Street, Monrovia, had only one ivory item, a 10-cm cigarette holder.

Pomona Antique Center

On Antique Row on 2nd Street in Pomona, this market of 50 outlets had only three ivory items, a 10-cm hors d'oeuvre fork, a knitting needle and a hook.



Pomona Antiques Faire

About every three months the 2nd Street Antique Row in Pomona holds a street antique market at the weekend. In late March 2007 about 50 stalls were set up selling second-hand goods and collectibles. Three stalls had on sale 37 ivory items. One vendor had only a 3-cm elephant figurine and another offered just one 10-cm cigarette holder. The third outlet had a small tray full of 33 jewellery items such as bangles, bead necklaces, earrings, brooches, rings and pendants. The investigator witnessed an ivory sale here during the survey.

Santa Monica Airport Antique & Collectibles Market

The car park of Santa Monica Airport is home to a quite small outdoor market on the first Sunday in the month. Seven stalls were selling 29 ivory items, consisting of 17 jewellery pieces, 11 Chinese human figurines and one horn. There were many bone and synthetic ivory substitute items, but no mammoth ivory. A zebra skin was also seen for sale.

Antique shops in Greater Los Angeles

More than 400 antique and gift shops were surveyed. Thirty-six in Los Angeles city, four in Pasadena and two in the San Gabriel Valley were found selling ivory. All those selling ivory were antique shops; no gift or jewellery shops had ivory for sale.

West Los Angeles and Santa Monica

This area includes Hollywood, Brentwood, Beverly Hills and the beach towns and is the wealthiest part of Los Angeles. None of the 22 antique shops in this area carried much ivory, except one on Melrose Avenue that offered 56 ivory items. Most of the 'antiques' in this shop were gaudy home decorations of questionable antiquity, but two cabinets displayed 28 ivory human figurines (26 Chinese and 2 European), 20 Chinese netsukes (USD 500 each), three animal figurines, a 27-cm Chinese incense burner, a 9-cm clam shell with tiny figures inside, an 8-cm Canton magic ball on a 22-cm pedestal, and two pairs of chopsticks. A set of eight Lohan figures 15-cm tall was priced at USD 4,500 and a 22-cm Chinese painted lady was USD 1,200. The carving quality was not high. The vendor said that all the items were 19th or early 20th century in age. Another large antique shop on Melrose Avenue had 32 ivory items, some quite unusual, such as a 30-cm-high filigreed ivory basket (USD 3,700) and a *samisen bachi* (plectrum for a Japanese musical instrument). The shop also had three Chinese fans, four boxes, three Chinese figurines, four carved plaques and screens, a large Indian wooden elephant with two 12-cm ivory tusks and ivory inlay, and an Indian wood carving flanked by two mounted 20-cm polished tusks.

Another shop on Melrose Avenue carried a pair of 14-cm African bust bookends, a second nearby offered a 34-cm Yoruba (Nigerian) divination figurine priced at USD 30,000 and a third had four African bracelets. One shop in Beverly Hills sold two African ivory busts, one 12-cm high (USD 295) and the other 14-cm high (USD 395), and a 42-cm African carved tusk (USD 2,000). These were the only African pieces found in this area. The Beverly Hills shop with the African items also had five Japanese netsukes priced at USD 445-1,295.

A shop on San Vicente Boulevard in Brentwood had 49 ivory items. Thirteen of these were jewellery, 15 were Chinese and Japanese human figurines, four netsukes, a 13-cm tiger, a 53-cm Chinese elephant bridge, and there were snuff bottles, paperknives and napkin rings. An exclusive Japanese-owned shop on Wilshire Boulevard across from the La Brea Tar Pits displayed 11 high quality Japanese ivory items in a museum setting: a 14-cm painted lady, seven netsukes, a 7-cm name seal and two carved plaques. Unfortunately, the owner was not there and the sales lady did not know the prices.

European items were found in eight shops. One shop had two 13-cm angels (USD 480/pair), four 12- to 16-cm paperknives (USD 160-200) and four magnifying glasses. Another shop carried a writing desk with ivory inlay and a 14 x 7 cm ebony and ivory box, and a shop in Beverly Hills had an 8-cm high round carved ivory box priced at USD 2,000. This shop also had a 12-cm high human skull made of walrus ivory. Other shops had a pair of ivory candlesticks, cane handles, a 25 cm x 18 cm Italian ivory inlaid box, other boxes, photo frames and brush handles. West Magnolia Boulevard in Burbank, a town on the northern fringe of the city, had eight antique shops in an area called the Magnolia Park Antique Stores. One had 16 ivory items, some from Europe, including a brooch, 12 knife and fork handles and a pair of serving utensil handles. Another West Magnolia shop had two Chinese figurines and three Chinese netsukes.

China Town

Los Angeles's China Town is not far from the civic centre. Its main thoroughfares are Hill Street and Broadway and many large tourist shops and markets and other sprawling Asian-style markets are in the area. Seven of the eight places found selling ivory in China Town were on a pedestrian walkway called Chung King Lane. These seven shops displayed 609 ivory items, and many mammoth ivory, bone and synthetic ivory substitute pieces. The



shop with the most ivory had 172 items and the second highest had 159 ivory pieces. All the ivory items were the typical categories seen in Chinese shops elsewhere. The prices varied considerably from shop to shop, with some having very low prices and one in particular having very high prices. For example, a 0.5-cm thick bangle was USD 25 in one shop and USD 155 in the expensive shop that, on many pieces, added dates of manufacture to the price tickets. The dates were all in the 1950s or earlier. A large bead necklace was USD 65 in the inexpensive shop and a small bead necklace was USD 495 in the expensive one. Other high-priced items in the expensive shop were USD 895 for a 15-cm physician's lady, USD 1,250 for a 12-cm swan, USD 23,000 for a 58-cm carved tusk, USD 295 for a pair of chopsticks and USD 295 for an 18-cm cigarette holder. The ivory items looked old, but age can be faked. The eighth ivory source was a very large wholesale importer's warehouse on Broadway where the lady in the office, the daughter of the Chinese owner, said that they did not sell retail. In the office in glass cases and outside in another room were hundreds of carved mammoth, hippo and pig ivory pieces. Inspection showed that 29 items were elephant ivory, which the lady confirmed, even admitting that they had only recently imported some. Apparently she did not know about CITES. This wholesaler supplied many antique and souvenir shops in Los Angeles and elsewhere, including one that the company owned on Chung King Lane.

East Los Angeles

A Chinese-owned antique shop on Las Tunas Avenue in Temple City had 67 Chinese and Japanese ivory items. The only jewellery item seen was a large bead necklace. The shop had 25 human figurines (a 25-cm Geisha of mediocre quality was USD 900), six animal figurines, 17 netsukes (a 9-cm one was USD 900), two elephant bridges on carved tusks, four containers, two fans, three cigarette holders and seven snuff bottles. A 19-cm Japanese *okimono* (figurine) of a dragon and man was USD 2,500. Several pieces were of mammoth and walrus ivory and bone. The owner said that the ivory items were genuine antiques and showed the investigator a photograph of a 38-cm Kwan Yin figurine in a book of Asian antiques and said it was Japanese. He brought out a carving and said that it was the figurine in the photograph and the price was USD 9,000. The book labelled the piece in the photo as southern Chinese, not Japanese, and the figurine in the shop was probably a replica. The shop's business card showed it sold antiques on two Internet sites that the investigator later viewed. The contact telephone numbers were in Taiwan. The Web sites advertised dozens of ivory items for sale. The shop owner said he had many more ivory items in stock, and it seemed highly likely that they imported the worked ivory from Taiwan. By putting the Web site addresses on the business cards (and in American antique magazine advertisements that the investigator found) the proprietors were encouraging people in the USA to import ivory from Taiwan.

Pasadena

Only four antique shops were found in Pasadena, selling 28 ivory items. Two of the shops were Japanese-owned, with one selling 19 netsukes and one container and the other having only a wood lacquered inro with two tiny ivory figures on it. The remaining two shops offered a 1-cm bangle, three ivory beads, an umbrella with an ivory handle and two Chinese human figurines (6 cm for USD 140 and 10 cm for USD 300). The gift shop of the Pacific-Asia Museum had about 10 ivory netsukes for sale in 2005 (Stiles, personal observation), but these had all gone by May 2006. The investigator advised the shop manager not to restock.

San Gabriel Valley

Only two antique shops were found with ivory, one in Rancho Cucamonga with two small bead necklaces and an 8-cm European human figurine, and the other in Claremont with two brooches.

Retail prices in Greater Los Angeles

Prices of similar type items varied considerably between exclusive antique boutiques in West Los Angeles and lower priced outlets in outdoor markets and China Town. Table 72 presents ranges for representative items.

Table 72

Retail prices for ivory items seen in Greater Los Angeles, March-May 2006 and March-May 2007

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	East Asia	50-125
	1	?	50

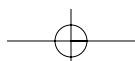


Table 72 continued

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
	2-4	Africa	100
	2-4	China	65-230
	2-4	?	100-125
Bracelet	2-4	?	95-98
Brooch	4-7	?	24-250
Earrings, pair		?	22-89
Necklace, small beads		China	54-495
		?	50-85
Necklace, large beads		China	50-129
		?	200-279
Pendant	5-8	China	95-255
	5-6	?	95-145
	4	Europe	58
Ring		?	30-150
FIGURINES			
Animal	7-8	China	95-450
	11-13	China	155-1,250
	55	Japan	2,500
Human	6-10	East Asia	85-1,225
	6-10	Japan	225-350
	6-10	USA	162
	6-10	China	58-395
	11-20	Africa	295-395
	11-20	Europe	240-2,295
	11-20	China	86-1,200
	11-20	Japan	380-1,250
	25	Europe	495
	21-30	China	900-1,200
	21-30	Japan	2,250
	34	Africa	30,000
	38	East Asia	9,000
Netsuke	4-7	East Asia	85-555
	4-6	China	95-500
	5-9	Japan	445-1,295
TUSKS			
Carved	42	Africa	2,000
	28-58	China	2,000-23,000
Hollow section	25-32	China	1,800-18,000
Raw, tusk section	35	?	440
MISC.			
Chopsticks, pair	18	China	100-295
Cigarette holder	7-18	China	15-295
	10-12	?	45-65
Magnifying glass handle	11	Europe	195
Paperknife	16	Africa	85
	12-16	?	99-200
Name seal	5	China	40-200
Snuff bottle	7	China	295-450
Utensil handle	8	USA	10-16



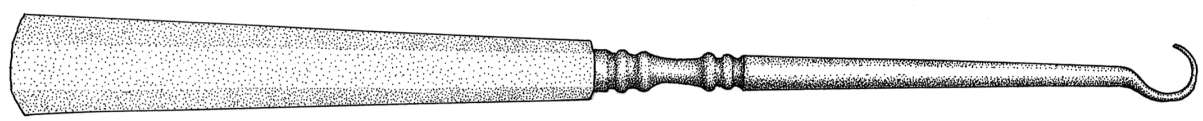
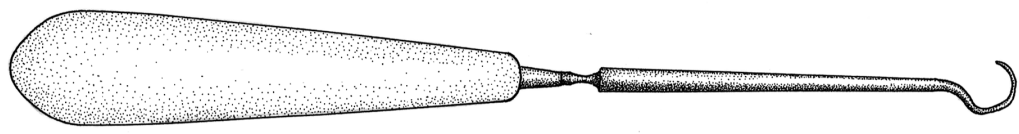
SAN DIEGO

San Diego, California, is the seventh largest city in the USA with about 1.4 million inhabitants. It is a large port south of Los Angeles and on the border with Mexico. It is the home port of a fleet of the US Navy, and Camp Pendleton, an important US Marines training base, is just north of the city. Informants in antique shops said that sailors and marines returning from overseas sometimes brought worked ivory to sell. Ocean Beach Antique District on Newport Avenue and Antique Row on Adams Avenue were the two main areas surveyed.

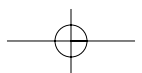
A total of 684 ivory items were found in 29 outlets. Twenty-three of the outlets were located in six antique markets with a total of 636 ivory pieces, and there were five antique shops in San Diego with a total of 45 ivory items, and one shop in Oceanside, just north of the city, with three ivory items. Table 73 shows a breakdown of the types of outlets and numbers of ivory items seen in San Diego.

Table 73
Types of retail outlets and number of ivory items surveyed in San Diego, March 2006 and March 2007

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	23	79	636	28
Antique shop	6	21	48	8
<u>Total</u>	<u>29</u>	<u>100</u>	<u>684</u>	<u>24</u>



Bootlace hookers, USA





The most numerous items were jewellery at 164 (24%), followed by chess pieces with 96 (14%), human figurines with 89 (13%), netsukes with 41 (6%) and animal figurines with 29 (4%). See Table 74 for a complete breakdown of item types. Of the 231 items that could be attributed to place of manufacture, 152 (66%) were Chinese, 48 (21%) American, 17 (7%) Japanese, nine (4%) European and five (2%) African.

Table 74
Ivory items seen for retail sale in San Diego, March 2006 and March 2007

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Jewellery	164	24
(Bangle 0.5-1cm)	24	4)
(Bangle 2cm)	16	2)
(Bangle 2-4cm)	1	<1)
(Bracelet)	2	<1)
(Necklace, small beads)	21	3)
(Necklace, large beads)	26	4)
(Pendant)	18	2)
(Brooch)	5	1)
(Earrings, pair)	31	5)
(Ring)	20	3)
Chess piece	96	14
Human figurine	89	13
Netsuke	41	6
Animal figurine	29	4
Container	27	4
Napkin ring	21	3
Small sphere	21	3
Chopsticks, pair	17	2
Utensil handle	9	1
Razor handle	8	1
Brush	5	1
Paperknife	5	1
Ruler	5	1
Cigarette holder	3	<1
Carved tusk	1	<1
Name seal	1	<1
Snuff bottle	1	<1
Misc.	141	21
<u>Total</u>	<u>684</u>	<u>100</u>

Recently-made (post-1989) ivory items in San Diego

At least 237 (35%) of the 684 ivory items found in San Diego could have been made post-1989, while 218 (32%) appeared to be pre-1989. No age could be confidently assigned to the remaining 229 (33%). Two of the possibly recent items were African and the rest were East Asian, mainly jewellery, netsukes, paperknives and cigarette holders.

Antique markets in San Diego

Six antique markets with 23 outlets consisting of many stalls were found selling ivory (see Tables 75 and 76). A large outdoor market called Kobey’s Swap Meet held at the San Diego Sports Arena was surveyed on a Saturday, but only scrimshawed whale teeth and walrus ivory items were found there.

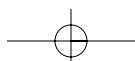


Table 75

Number of retail outlets in markets seen with ivory items in San Diego, March 2006 and March 2007

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
Antique Mall	60	3	5
Antiques on Kettner	9	3	33
Cracker Factory Antiques Center	100	2	2
Newport Avenue Antique Center	30	3	10
Newport Avenue Antiques	20	4	20
Ocean Beach Antique Mall	40	8	20
<u>Total</u>	<u>259</u>	<u>23</u>	<u>9</u>

Table 76

Number of ivory items seen in San Diego markets, March 2006 and March 2007

<i>Name of market</i>	<i>No. of items</i>
Antique Mall	38
Antiques on Kettner	27
Cracker Factory Antiques Center	14
Newport Avenue Antique Center	22
Newport Avenue Antiques	146
Ocean Beach Antique Mall	389
<u>Total</u>	<u>636</u>

Antique Mall

This large antique market was on 16th Street in downtown San Diego. Three of the about 60 outlets offered 38 ivory items. Nearly half, 16 items, was jewellery. The rest consisted of six 10-cm Chinese figurines, a 14-cm European female figurine, five netsukes, two small animal figurines, a 15-cm Chinese brush pot and seven small Chinese items (chopsticks, containers, cigarette holder, etc.).

Antiques on Kettner

On Kettner Avenue, this small market had three vendors displaying 27 ivory items. There were 15 jewellery pieces, including a pair of ivory cufflinks, four 5-10-cm Chinese human figurines, seven Chinese netsukes and a tiny house made of ivory.

Cracker Factory Antiques Center

This antique market offers three floors with 14 individually owned and operated shops filled with antiques and collectibles. It was on Market Street, across from the Hyatt Regency San Diego. Two outlets were selling 14 ivory pieces, including 11 jewellery items, a 14-cm African bust, a 5-cm name seal (USD 95) and an 8-cm round container with a lid.

Newport Avenue Antique Center

Of the markets on Newport Avenue, this was possibly the largest by floor area and offered 22 ivory items in four of its 20 stalls. There were eight hand razors with ivory handles, a 16-cm Chinese figurine, three jewellery pieces and two pairs of knives and forks with ivory handles (USD 20 each). An 11-cm paperknife was priced at only USD 11.

Newport Avenue Antiques

This market, also on Newport Avenue, won the 2006 Platinum Award for San Diego's Best Antique Store. Four of about 20 dealers displaying there offered a total of 146 ivory items. For sale were 13 bangles ranging from 0.5 to 2 cm in thickness (USD 85-345), seven bead necklaces and nine other jewellery items. A 9-cm Japanese figurine was priced at USD 475 while a 7-cm Chinese figurine cost USD 245. The most expensive ivory item was a 19-cm European crucifix at USD 8,800. A pair of 15-cm African busts carved on small tusks was priced at USD 845.

Seven pairs of old Chinese chopsticks were selling for USD 245-300 and two oval 14-cm Victorian hairbrushes were USD 600 each. There were also 21 small solid ivory spheres 5-8 cm in diameter priced at USD 125-600 each.

Ocean Beach Antique Mall

Over half of all the ivory seen in San Diego was in this large antique market, again on Newport Avenue. It carried 389 items in eight of the about 40 outlets. The market had a wide range of antiques. There were 78 jewellery items, 47 mostly Chinese human figurines (two were African), 25 animal figurines, 17 containers (one of them French, priced at USD 700), three chess sets (USD 307-345 each), three jackknives with ivory handles, nine pairs of chopsticks, two hand mirrors with ivory handles and four napkin rings (USD 65 each).

Antique shops in San Diego

Five shops were found in downtown San Diego and one in Oceanside. In San Diego, two shops were on Newport Avenue, two on Adams Avenue and one on West Morena Boulevard. The latter shop specialized in Japanese and Chinese antiques and was selling six 13-18 cm Japanese figurines, four 12-16 cm Chinese figurines and seven 4-7 cm Japanese netsukes. The two shops on Adams Avenue sold low quality antiques and collectibles, including 16 ivory items. A small bead necklace was priced at USD 150, a 9-cm squat Chinese emperor figurine was USD 650 and the only ivory snuff bottle found in San Diego, 6 cm high, was USD 125. One shop on Newport Avenue had five ivory jewellery items and four 12-cm Chinese sages at USD 135 each, or USD 300 for the set. The other Newport Avenue shop had only three ivory pieces, a 10-cm round box and two hand mirrors. The shop in Oceanside had only three ivory items.

Retail prices in San Diego

Table 77 shows the prices for items seen in San Diego.

Table 77

Retail prices for ivory items seen in San Diego, March 2006 and March 2007

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	0.5-1	?	85
	1	?	155-195
	2	?	275-345
Necklace, small beads		China	150
Necklace, large beads		China	199-495
Earrings, pair		?	30
Pendant	5	?	65
FIGURINES			
Animal	5-10	?	398
Human	5-10	China	245-650
	5-10	Japan	475
	11-20	China	135
	19	Europe	8,800
	32	China	950
Netsuke	5-6	China	195
	4-7	Japan	225
TUSKS, Carved	15	Africa	423
MISC.			
Chopsticks, pair	15	China	199-300
Cigarette holder	9	?	30
Name seal	5	China	95
Napkin ring		USA	65-105
Paperknife	11-15	?	18-85



HONOLULU, KAILUA AND KANEOHE (OAHU ISLAND, HAWAII)

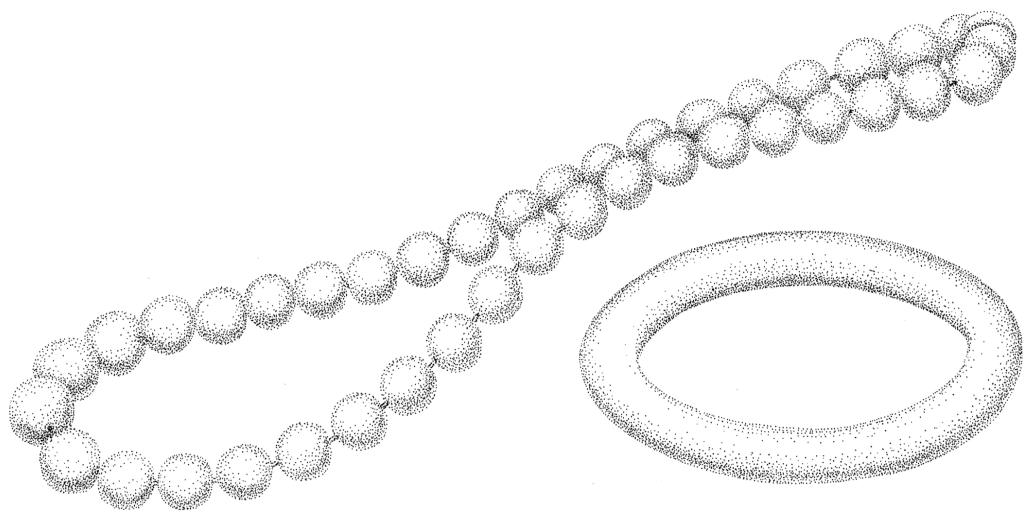
Oahu is one of the USA's seven Hawaiian Islands and is the most populous, with about 450,000 people. Most of the survey time was spent in Honolulu (390,000 inhabitants), the capital of Hawaii State and the largest city in the Hawaiian Islands. One day was spent driving to other parts of Oahu where ivory was found for sale in two other towns, Kailua and Kaneohe. An Internet and tourist literature search followed by e-mailings to various businesses showed that visiting other Hawaiian islands would not be worthwhile as negligible amounts of elephant ivory were for sale. However, on Maui Island, Lahaina is an old whaling village where scrimshawing became popular in the 19th century and where it persists today. The workshops there specialize in scrimshaw work, but few use elephant ivory. A Lahaina company that makes scrimshawed knife handles states on their Web site that the elephant ivory used was legally bought in 1987 from a shipment that entered the USA in 1975.

A total of 1,867 ivory items in 23 outlets was found on the island, with 1,659 of the items and 18 of the outlets in Honolulu. Seven of the outlets were in three tourist markets. Kailua, the second largest town on Oahu, had four outlets with 204 pieces and Kaneohe nearby had one outlet with four items.

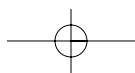
The types of outlets can be categorized as tourist markets (conglomerations of stalls, kiosks or shops in a large open area or multi-storey building) or individual antique shops. Table 78 shows the types of outlets and numbers of ivory items seen in Honolulu.

Table 78
Types of retail outlets and number of ivory items surveyed in Honolulu, March 2006

<i>Type</i>	<i>No. of outlets</i>	<i>% of total with ivory</i>	<i>No. of items items per outlet</i>	<i>Av. no. of</i>
Antique market	7	39	1,454	208
Antique shop	11	61	205	19
<u>Total</u>	<u>18</u>	<u>100</u>	<u>1,659</u>	<u>92</u>



Jewellery, USA



The most numerous item by far was jewellery with 1,320 items (80%), followed in order by netsukes (12%), human figurines (4%), animal figurines (<1%) and chopsticks (<1%) (see Table 79). Over half the items (54%) were necklaces of various types. Of the 1,317 items that could be attributed to place of manufacture, 1,208 (73%) were from China (including Tibet), 42 (3%) from Japan, 52 (3%) from East Asia, 9 (<1%) from the USA, 4 (<1%) from Egypt, one from sub-Saharan Africa and two from Europe. None appeared to be from South or South East Asia. The unattributed pieces were most likely from China, the USA and Europe, in that order, based on type and style.

Table 79
Ivory items seen for retail sale in Honolulu, March 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Jewellery	1,320	80
(Bangle 0.5-1cm	73	4)
(Bangle 2cm	32	2)
(Bangle 2-4cm	7	<1)
(Bangle 5cm	1	<1)
(Necklace, small beads	453	27)
(Necklace, small beads with pendant	2	<1)
(Necklace, large beads	431	26)
(Necklace, large beads with pendant	4	<1)
(Necklace, other	4	<1)
(Pendant	5	<1)
(Brooch	12	<1)
(Earrings, pair	51	3)
(Ring	245	15)
Netsuke	194	12
Human figurine	60	4
Animal figurine	13	<1
Chopsticks, pair	10	<1
Filigreed panel	9	<1
Name seal	3	
Paperknife	3	
Fishhook	3	
Carved tusk	3	
Raw tusk	2	
Canton magic ball on pedestal	2	
Fan	2	
Cigarette holder	2	
Carved hollow tusk	1	
Container	1	
Snuff bottle	1	
Jackknife, scrimshawed	1	
Misc.	29	2
Total	1,659	100

Recently-made (post-1989) ivory items on Oahu Island

Of the 1,659 ivory items found on the island of Oahu, only 191 (11%) could with any confidence be judged as made before 1989. The vast majority, some 1,478 pieces (89%), could have been made after 1989. This includes seven ivory items carved in Honolulu by local artisans that could have been made from legal raw ivory. The ivory items seen at the three tourist markets described below appeared to be mostly from China and recently made.

Tourist markets in Honolulu

Honolulu had no antique markets. Three tourist markets with seven outlets selling ivory were found (see Tables 80

and 81). The markets sold recently-made tourist items, not antiques. The city had several other markets and shopping malls but no elephant ivory was found in them. A weekend art fair in Kapahulu Park had about 30 stalls selling jewellery and tourist souvenirs but, again, no elephant ivory was found. Two stalls sold items made from mammoth and walrus ivory.

Table 80

Number of retail outlets in markets seen with ivory items in Honolulu, March 2006

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
International Marketplace	100	2	2
Waikiki Shopping Plaza	26	4	15
Mahalo Antique Mall	120	1	<1
<u>Total</u>	<u>246</u>	<u>7</u>	<u>3</u>

Table 81

Number of ivory items seen in Honolulu markets, March 2006

<i>Name of market</i>	<i>No. of items</i>
International Marketplace	181
Waikiki Shopping Plaza	1,237
Mahalo Antique Mall	36
<u>Total</u>	<u>1,454</u>

International Marketplace

This large, partially open-air tourist market was in the centre of Waikiki, the main tourist area of Honolulu. It consisted of shops selling clothing, accessories and souvenirs, and small kiosks selling mainly jewellery. The outlets selling ivory were jewellery kiosks. One displayed 179 items, mostly rings, bead necklaces (some with large pendants), earrings and bangles. It posted a sign saying, 'Genuine ivory, Sale 70-80% off'. The rings had gold bands on them of a type seen in China. No vendor was present so prices and origin of the ivory could not be investigated. The other stall had two bead necklaces. The asking price was USD 200 each, but that was negotiable. Some jewellery items displayed in the market were made from walrus ivory and boar tusk.

Waikiki Shopping Plaza

This four-storey building contained 26 shops and floor kiosks selling craft and antique items, along with shops selling other types of merchandise. One Chinese-run jewellery shop on the top floor displayed about 800 bead necklaces, 98 rings (some with gold bands), five 16-18 cm Chinese figurines and two mounted 1.5-m unpolished tusks. The necklaces were priced from USD 120 to USD 220. The vendor would not admit that the large tusks were for sale. Most of the ivory in the shop looked recently-made, though the vendor said they imported it before the ban, which he said was about 10 years ago. A jewellery and art shop had 261 pieces for sale, with 162 netsukes 3-6 cm in size ranging from USD 85 to USD 1,800. The Chinese vendors said that some netsukes were Japanese. The shop also offered 14 female Chinese figurines 14 cm in height at USD 1,185-1,885 and one Chinese female figurine 22 cm tall at USD 2,285. The vendors said the figurines were made in Beijing. A few other Chinese items, (Canton magic balls and panels), and 88 jewellery items were for sale. A 2-cm wide bangle was USD 185 and a 4-cm wide one was USD 385. A gift shop was selling 63 ivory jewellery pieces (a 1-cm bangle was USD 33-36) and a jewellery kiosk had three Hawaiian ivory fish-hooks, with other fish-hooks and jewellery pieces made from walrus ivory and cow bone.

Mahalo Antique Mall

About 120 shops selling clothing, jewellery and tourist souvenirs occupied this large, two-storey mall in Waikiki. One gift shop had 36 ivory items for sale, including 15 jewellery articles, nine 5- to 15-cm Chinese human figurines, three individual chopsticks, two fans and two 18-cm paperknives at USD 100 apiece.



Antique and jewellery shops in Honolulu

Five of 11 shops were in Waikiki and six in Honolulu, three of those being in the China Town district. One small department store in China Town was visited three times over eight days, but was always closed. What looked like ivory carvings could be seen through the window, so this survey counted it as an ivory outlet, though no item numbers were recorded.

Downtown Honolulu

The most impressive shop was an antique boutique specializing in Asian fine art. This shop (called Robyn Buntin), displayed 84 ivory items from Japan, China, Tibet and Hawaii, with four additional pieces made from walrus and mammoth ivory. The most expensive was a pair of dragon-lions with Chinese ladies sitting on them 38 cm high costing USD 38,000. Three Japanese *okimono* (figurines, often with more than one figure and/or object in it) were priced at USD 12,000 each, 21 Japanese and Chinese netsukes ranged in price from USD 950 to USD 11,500, a 20-cm Geisha was USD 18,000 and a bird feeder was USD 2,200. A Victorian British card case was priced at USD 650. A mammoth ivory Chinese 16-cm figurine cost USD 4,700 and a 38-cm walrus ivory carved tusk was USD 6,500. The other outlet in Honolulu city was a Japanese wholesale warehouse with seven netsukes selling for USD 330-2,250. The netsukes were in plain sight, but when asked the Japanese vendor said that they had no other ivory items. Boxes and crates were piled everywhere, including under the open box displaying the netsukes, so it is possible the vendor became suspicious of the investigator's questions and did not answer truthfully. Another shop with six ivory items had two pikaki flower necklaces at USD 175 and USD 200, a Japanese necklace with various size beads and a painted plaque and ball at only USD 175, a 7-cm French parasol with a tiny hole through which one could view a photo costing USD 150, a 3-cm elephant exorbitantly priced at USD 200 and a scrimshawed jackknife.

Waikiki

Three of the several antique shops along Kapahulu Avenue in Waikiki were found selling a total of 24 ivory items. One shop was selling a 13-cm supposed Meiji period Japanese figurine for USD 1,500, four small netsukes at USD 200-250, a 25-cm African elephant bridge for USD 500 and two thick elephants weighing an estimated 500 and 600 gm respectively at USD 1,800 each. The vendor said they were Egyptian and made in the 1940s; they were not well crafted. Another outlet was a famous Hawaiian shirt shop that displayed nine ivory items: three square plaque necklaces, two brooches, a 5-cm Chinese figurine and three miscellaneous items. The third shop had only three old ivory brooches. Of two other antique shops in Waikiki, one displayed 79 ivory articles, mostly jewellery (60), along with two 6-cm Chinese figurines and seven pairs of chopsticks priced at only USD 18 each, while the other had just one 20-cm Japanese figurine for USD 2,450.

China Town

In spite of most of the ivory items seen in Honolulu originating in China, there was remarkably little ivory in China Town. Other than the closed department store mentioned above with an unknown quantity of ivory, only two jewellery shops with four items could be found. One had a Kwan Yin pendant selling for USD 70 and the other displayed an 18-cm Kwan Yin figurine and two 11-cm painted cigarette holders. Several shops were selling substitute ivory items (resins and bone).

Retail prices in Honolulu

Table 82 shows the prices for items seen in Honolulu.

Table 82
Retail prices for ivory items seen in Honolulu, March 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	China	33-185
	2-4	China	195-385
	3	Japan	650
Brooch	4-6	China	200
		USA	250
		Europe	379
Necklace, small beads		China	120-2,250

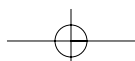


Table 82 continued

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
Necklace, large beads		China	175-220
		USA (Hawaii)	725
Pendant		China	70
		Japan	950
Ring		China	30
FIGURINES			
Animal	5-10	China	3,500-8,000
Human	5-10	China	350-1,250
		Japan	2,500-5,500
	11-20	China	1,185-1,885
		Japan	2,450-18,000
	21-30	China	2,285
31-40	China	19,000	
Netsuke	3-7	East Asia	200-11,500
TUSKS			
Carved	45	China	6,500-8,500
Carved, hollow section	28	China	8,500
MISC.			
Carved plaque	15	Japan	7,200
Cigarette holder, painted	11	China	100
Chopsticks, pair	15	China	18
Paperknife	18	?	100
	17	Japan	950
Name seal	5	China	325
	5-7	Japan	750-4,500

KAILUA

Four antique shops selling ivory were found in Kailua, on the east coast of Oahu. Two near to each other belonged to the same owner (Ali'I Antiques I and II). The largest was selling 164 ivory items, of which 117 were jewellery, 22 were 5-15 cm human figurines, and five were animal carvings. A 15-cm ivory African mask was priced at USD 250 and a 28-cm African carved tusk elephant bridge was USD 550. There were also three Chinese name seals. The smaller shop had two pieces that the vendor was not certain were elephant ivory; they were both 7-cm carved symbols said to belong to Hawaiian chiefs.

The third shop contained 21 ivory items, 15 of them jewellery articles. Two large rings were priced at USD 100 each, a poorly carved 6-cm Chinese figurine cost USD 55, a small Chinese fan was USD 195 and an 8-cm high box with a disk attached by a cord was USD 695. The fourth antique shop displayed 17 ivory pieces, 16 of them jewellery articles. Four pikaki flower bead necklaces were priced at USD 195 apiece, earrings ranged from USD 45 to USD 56 and a 37-cm long Chinese junk (boat) labelled 'from the 1200s' was USD 775.

KANEOHE

One antique shop was found selling four ivory items: two large-bead necklaces at USD 295 each and two pairs of earrings at USD 95 apiece.

STATUS OF THE IVORY TRADE IN THE USA

Ivory trade indicators for 2006/2007

Raw ivory imports

From 1990 to 2005, after the imposition of the CITES ivory trade ban, 3,530 tusks entered the USA as either sport-hunted trophies or pre-Convention specimens, an average of 221 a year (see Table 3). Most were from African elephants, but a few were Asian. By law those that are not pre-Convention should not be used commercially, but the fact that raw tusks continue to turn up for sale on Internet sites, at estate auctions and in shops suggests that they are an illegal source of raw ivory for carvers. In fact, some carvers admitted during this investigation to having purchased tusks on the Internet, some of which may have been imported after 1989. Most of the African tusks came from Zimbabwe and Botswana, followed by South Africa and Tanzania in that order (Williamson 2004; UNEP-WCMC CITES Trade Database, *in litt.*, June 2007). Additionally, between 1995 and 2005, African and Asian elephants have provided more than 2,400 pieces of raw ivory imports. Between 1995 and 18 July 2007 the USFWS LEMIS database reported the seizure of 351 tusks, 15.2 kg of tusks, 724 raw ivory pieces and 495 gm of raw ivory pieces.

Raw ivory prices in 2006/2007

Raw ivory prices in the USA vary considerably based on the size and quality of the tusk or tusk section. Craftsmen buy much of their ivory in semi-worked form as small slabs, particularly those who specialize in knife and pistol handles, scrimshaw and jewellery. Prices per kg for these pieces can be extremely high. They are sold based on size, not weight, and the high price reflects the savings a craftsman makes on labour and by eliminating his need for specialized cutting tools. In the USA smaller tusks often command a higher price per kg than larger ones, the opposite of the Asian and African case. Prices obtained through the personal networks of craftsmen seem to be considerably lower than on some Internet Web sites; prices for comparable items on Web sites can vary significantly. Table 83 lists prices for various types of raw ivory found on the Internet.

Table 83

Prices of tusks, tusk sections and semi-worked raw ivory sold on the Internet in the USA, 2006/2007

<i>Type</i>	<i>Price USD/kg</i>
Scraps: Grade A chunky	92
Grade A flattish	84
Grade B flat	31
Hollow base of tusk 1-2kg	165
Section of hollow base <1kg	121-330
Solid tusk section <1kg	793-1,760
<1kg tusk tip	209-900
Cut rectangular slabs <0.3kg*	150-930
1-5kg tusk**	346
5-10kg**	185
10-20kg	264
>20kg***	287-293

*The slabs measured 7.5-12.5cm long, 2.5-5cm wide and 0.3-1cm thick.

**Only one pair of whole tusks of this size was found on the Internet.

***One price was obtained from an individual in e-mail correspondence.

Sources: www.boonetradings.com; www.coastivory.com; www.ivoryhound.com; www.finetournage.com; International Ivory Society Newsletter No.12, 2007



The weights of some pieces advertised on Web sites had to be estimated, as they were not given. The high range of prices was because two Web sites sold the same types of ivory pieces at very different prices. Solid tusk sections and tusk tips command the highest prices as they can be used to produce the most expensive items. Other categories of semi-worked raw ivory exist but were not entered in Table 83.

In 2006, for some categories of raw ivory informants gave lower prices than those seen on the Internet. For example, the informants said for 0.5-kg and damaged tusks they paid USD 110-115/kg and USD 154-220/kg for 3-4 kg tusks, well below the prices seen on the Internet for these sizes. For over 5-kg tusks they paid USD 154-198/kg, within the range of the prices seen on the Internet for 5-10 kg tusks. However, rarely were whole tusks found for sale in the USA for few American craftsmen are interested in buying them.

Number of retail outlets and number of ivory items seen

Table 84 presents the aggregated data for the number of retail outlets selling ivory and the minimum number of ivory items found for the 16 cities and towns surveyed in the USA. In addition, 234 ivory items were found in 45 outlets in Vancouver, Canada.

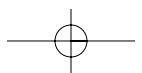
Table 84

Number of retail outlets selling ivory and minimum number of ivory items found in the USA

<i>Place</i>	<i>Number of outlets selling ivory</i>	<i>Minimum number of ivory items</i>
New York City	124	11,376
San Francisco Bay Area	49	2,777
Greater Los Angeles	170	2,605
Oahu	23	1,867
Palm Beach	10	885
Greater Miami	11	865
Boston & Cambridge	20	758
San Diego	29	684
West Palm Beach	14	529
Dallas	49	322
Houston	44	267
Chicago	18	255
Washington, D.C. area	25	236
Las Vegas	21	212
Greater Phoenix	28	208
Atlanta	22	158
<u>Total</u>	<u>657</u>	<u>24,004</u>

A total of at least 24,004 ivory items in 657 outlets was found in the 16 cities and towns surveyed in the USA. The largest number by far was found in New York City and most were old ivory. The second largest was in San Francisco Bay Area, primarily because of the large amount of ivory found in the city's China Town, which has strong links with Hong Kong. Although impossible to verify, much of this ivory could be recently made. Greater Los Angeles had the third largest market seen and the largest number of outlets selling ivory seen in the USA. Again, many of the ivory items appeared recently made. The relatively small city of Honolulu held a surprisingly large amount of ivory, which could be attributed to the many tourists providing a market and a large East Asian community providing most of the ivory. Well over half the ivory seen was possibly recently imported from China, though, again, this was not possible to prove. The quite small communities of Palm Beach and West Palm Beach had the highest per capita quantities of ivory seen, because some of its wealthy residents and visitors are ivory collectors. Most of this ivory seemed genuinely antique, and thus potentially legal. Chicago, the third largest city in the USA, had a surprisingly small amount of ivory and few of the items seen were recently made. The remaining cities surveyed were all substantial in population (all more than 350,000), but all had small to moderate scale ivory markets (Table 84). Overall, one could say that the eastern USA had a much higher proportion of pre-1989 ivory items than the west.

Most buyers in the markets surveyed were USA residents. New York City attracts small numbers of buyers from Europe and Canada for antique and estate auctions, and mainly Japanese visitors from Asia form an important



component of buyers in Oahu. Non-American Asians do not normally shop for ivory in San Francisco or Los Angeles, as most of the ivory originates and costs less in East Asia. Although Las Vegas attracts many foreign visitors, they do not spend time going to the city's rather ordinary antique markets and shops. Most buyers in Vancouver are Canadian, though vendors said that on occasion Americans would buy ivory, mainly in the shops on Granville Street and in the Pan Pacific Hotel.

Internet retail ivory

Many Americans prefer to buy ivory on the Internet rather than in shops. Dozens of Web sites sell or auction ivory and the businesses concerned are often based outside the USA. This is especially so of Chinese companies that regularly use eBay. One Shanghai company advertised on eBay more than 1,000 netsukes and carvings made from elephant and mammoth ivory. A seller in Bujumbura, Burundi, advertised on a Taiwan-based Web site that he sells ivory animal figurines made in Angola, Congo and the Central African Republic. A further example is the company with the two Taiwan-based Web sites mentioned above in the Los Angeles section that also sells from a retail outlet and advertises in American antiques magazines. It is highly unlikely any of these suppliers' ivory could either be imported legally into the USA, or exported in compliance with CITES from China, Taiwan or Burundi. HSUS (2002), TRAFFIC (Williamson 2004) and IFAW (2007) have conducted extensive studies of wildlife trade on the Internet and have documented how several country eBay sites auction thousands of ivory items every year. TRAFFIC (Williamson 2004) documented how ivory was sent illegally to the USA from China labelled as bone, mammoth ivory or antique items. As a result of adverse publicity associated with the latest IFAW report, eBay announced in June 2007 that it was banning cross-border ivory sales on all its Internet auction sites (Max 2007).

This investigation found nine Web sites based in the USA buying and selling Appendix I-listed raw ivory, six of those selling elephant ivory. It also uncovered 18 Web sites that sell worked ivory exclusively on the Internet based in the USA. Some of these businesses do not provide a postal or street address and thus remain anonymous. Most of these sites place disclaimers that the ivory they sell is pre-ban and complies with CITES and ESA regulations. Auction houses that sell ivory on the Internet were too numerous to count, but many were found in this investigation based both in the USA and in other countries (mainly the UK). The manner in which they advertise the items for sale, the method of marking for shipment, the ports of entry used (for international sales), and the documentation provided with the items rarely complies with CITES or ESA provisions.

Imported worked ivory

Taking carved ivory, ivory jewellery and ivory piano keys, the three categories of ivory items used in the USFWS LEMIS database, between 1995 and June 2007 the USA imported more than 40,000 items. Most were ivory carvings, followed by piano keys, and only about 350 were jewellery pieces. These figures do not include almost 85 kg of worked ivory recorded by weight rather than number of pieces. During the same period, 8,852 worked ivory items and 15.2 kg of worked ivory were seized, according the USFWS LEMIS database. About 80% of the shipments originated in the UK followed by France (4%) and Canada (3%) (Williamson 2004; USFWS LEMIS Database, *in litt.*, July 2007). According to the ESA, only worked items at least 100 years old and with proper documentation can be legally imported into the USA. The source code for such pieces should be P, meaning pre-convention in age. Unfortunately, neither the USFWS nor CITES uses a specific source code for antiques in import-export documentation. Scanning thousands of LEMIS worked ivory shipment records for the period 1999-June 2007 shows most recorded under source code P, but many are W (from the wild) or U (unknown). The latter two codes seem unacceptable in terms of legal ivory importation according to CITES and ESA provisions.

Retail worked ivory prices in 2006/2007

Prices varied according to the quality and age of the item, the type of outlet and the country of manufacture. The higher prices seen in Table 85 were usually for antiques from Japan or Europe, or occasionally from China. Items from Africa usually commanded the lowest prices, except for an antique Yoruba divination figurine from Nigeria. New Chinese-made items were also quite inexpensive. Honolulu (Oahu), New York City, Palm Beach and San Francisco Bay Area appear the places with the most expensive worked ivory. Table 85 shows a range of retail prices for typical ivory items found in the eight largest market cities and towns in the USA.

Table 85
Retail asking prices in USD for ivory items in the USA, 2006/2007

<i>Ivory item in cm</i>	<i>Boston & Cambridge</i>	<i>New York City</i>	<i>Greater Miami</i>	<i>Palm Beach</i>	<i>San Francisco Bay Area</i>	<i>Greater Los Angeles</i>	<i>San Diego</i>	<i>Oahu</i>
Animal figurine								
5-10	58-575	95-135	-	285	99-350	95-450	398	3500-8000
11-20	-	1100-3700	-	-	395-1250	155-1250	-	-
Bangle/ bracelet								
1	32-135	-	-	-	79-95	50-125	155-195	33-185
2-3	72-275	30-500	-	-	180	65-230	275-345	195-650
Chopsticks, pair								
15-20	-	-	-	-	99	100-295	199-300	18
Cigarette holder								
9-15	-	-	-	-	45-70	15-295	30	100
Human figurine								
5-10	75-1600	50-2200	129	95-2450	125-5500	85-1225	245-650	350-5500
11-20	340-940	400-35000	17000	-	180-18000	86-2295	135-8800	1185-1800
21-30	-	780-2600	-	-	1000-18000	495-2250	-	2285
31-40	-	1000	-	3750	6000-33000	9000-30000	950	19000
41-50	-	-	-	15000	7000-16000	-	-	6500-8500
Name seal								
4-7	-	-	-	-	225-330	40-200	95	325-450
Necklace, beads								
small	-	50-280	55-289	-	95-125	50-495	150	120-2250
large	-	-	-	-	190-250	50-279	199-495	175-795
Netsuke, medium								
6	40-500	30-3600	650-675	2000-85000	120-4500	85-1295	195-225	200-11500
Paperknife								
10-20	85-120	75-795	44	125-450	100-125	85-200	18-85	100-950
Pendant/ brooch								
2-7	38-195	-	14-100	-	16-148	24-255	65	70-950
Ring, plain								
Tusk, carved								
10-20	-	-	-	-	295-999	30-150	423	-
21-30	-	-	-	-	750	-	-	-
41-50	-	-	-	-	-	2000	-	6500-8500
50-90	-	80000	-	2000-24000	5000-55000	23000	-	-
Tusk, polished								
100-120	-	3667	-	-	8950	-	-	-
120-170	-	-	-	-	18000-48000	-	-	-

Deceptions, fakes and reproductions

A deceit that some salesmen carry out is pretending that elephant ivory netsukes are made of hippo teeth or mammoth tusks. This is because many Americans mistakenly believe that selling ivory items, new and old, is illegal in the USA, or they think that buying them is morally wrong. Other vendors, particularly in San Francisco Bay Area, did the opposite; they tried to pass off mammoth ivory as elephant ivory.

The main deception perpetrated by some shop vendors is over the authenticity of items, particularly Art Deco figurines and figures, and especially those by the sculptor Dimitri Chiparus. Most are female figures with at least the face and hands carved from ivory and often the legs and arms as well. The rest of the body is cast bronze which is silvered or gilded. These are called chryselephantine (meaning the combination of ivory with gold or gilt bronze) sculptures (St Aubyn 1987). Usually they are 20-100 cm high, with one to four figures on one base. These figures are supported on magnificently carved pieces of stone, mostly onyx or marble, that themselves are works of art.

Chiparus had a studio in Paris that was especially active in the 1920s and 1930s when Art Deco was popular with the middle and upper classes, especially in Europe. Chiparus worked frequently in ivory. On account of its popularity, imitators at this time copied these designs; most used ivorine (a plastic) as a substitute for ivory and replaced bronze with spelter (an alloy of copper and zinc). These imitations were extensively fabricated in the Faubourg St Antoine (furniture-making) quarter of Paris (Shayo 1999; Burack 1984).

Chiparus also made less expensive figures of ivorine and spelter, specifying they were made of ivory substitutes, in order to compete with the crude Art Deco objects made by the studios that were trying to deceive the public that their figures were original Chiparus pieces with ivory. So many crude figures were made, however, that the market became flooded and many dealers refused to sell them because they could not authenticate them. Major auction houses in London also refused to sell them for years later (Burack 1984).

Another method of deception over the years has been employed by dealers who put a fake figure on an original stone base signed by Chiparus, as he usually only signed the base. These are then sold at high prices as original Chiparus's (Shayo 1999). Sometimes, however, the signature can also be faked.

Imitation Chiparus's were made in the 1950s and 1960s in New York and California under a licence. These reproductions were mostly bronze with the faces and hands carved from ivory. Their quality was reasonable. These were not intended to deceive the buyer, but disreputable businessmen sometimes deceived dealers with them.

From the 1980s California and China have produced forgeries made with poor quality bronze and ivory, and with no licences. That they are still making them is evidenced by the company found in Los Angeles.

Art Deco sculptures thus fall into several categories: authentic Chiparus ivory of the 1920s/30s and authentic Chiparus ivorine; forgeries of Chiparus ivorine or ivory of the 1920s/30s; Chiparus ivory reproductions of the 1950s/60s under licence; fake Chiparus ivory on an original stone base; and the modern ivory fake Chiparus's still made today with fake signatures. Prices vary: an original ivory Chiparus sells for USD 30,000-100,000, a 1950s/60s reproduction Chiparus ivory item under licence for USD 5,000-10,000, and a modern ivory forgery for USD 1,000-6,500 depending on the dealer's persuasion and on the gullibility of the customer.

Ivory experts can easily identify original Art Deco items by Chiparus or others, such as Ferdinand Preiss (1882-1943). They say that any original Art Deco piece has a high-quality stone support, and the bronze and ivory details are outstanding (Fromkin, pers. comm., 2006, and Oleg Konstantinov, ivory restorer, pers. comm., 2006).

Genuine and fake Chiparus figures were seen in this survey mostly in New York City and San Francisco Bay Area, but also in Greater Miami and in Greater Phoenix. Those fakes being deceptively sold as originals that were of very good quality were offered at prices comparable to the originals. Obvious fakes of ivory and bronze were much less expensive, the cheapest being a 23-cm female for USD 1,500, while those of 30 cm were USD 2,800-6,500 after a 50-65% discount.

In a shop in Florida there was a collection of 23 Art Deco figures made by several outstanding craftsmen of the 1920s and 1930s, as verified to the investigator by a knowledgeable ivory restorer. One particularly outstanding Chiparus carving of a pair of humans about 75-cm high was offered for sale for USD 150,000. A 37-cm authentic Chiparus figurine sold in an antique shop in San Francisco for USD 33,000.

China, Myanmar, Cameroon and Nigeria also have active workshops that manufacture and treat ivory figurines to produce fake antiques. Various aging methods are used to give the figurines the appearance of antiquity (Martin and Stiles 2000, 2002, 2003; Stiles 2002). The best of these fakes can even dupe experts into believing they are genuine. For example, in the early 20th century Sir Arthur Evans, then the foremost expert on the Minoan culture of Crete, was deceived into believing that various ivory figurines found there were authentically Minoan, when later it was found that many had been made by a Greek working on the excavations (Lapatin 2003). Present-day Asian and African fake antiques are brought back to the USA by American travellers or are sold at auctions and Internet sites and imported into the USA by dealers and individual buyers as antiques. An unknown percentage of the more than 40,000 ivory items imported into the USA since 1995 were these fake antiques.

TRENDS IN THE IVORY TRADE IN THE USA

Indicators of ivory trade trends

Table 86 presents data on indicators from 1989 to 2007 obtained from published sources and from interviews with ivory craftsmen. There has only been a modest increase in price over the past 30 years for 3-4 kg tusks in the USA.

Table 86
Past and present ivory trade indicators for the USA

<i>Year</i>	<i>Av. wholesale USD price/kg for 3-4kg tusks</i>	<i>Av. wholesale USD price for tusks in 2007 using GDP inflator index</i>	<i>Craftsmen (full/part-time)</i>	<i>Retail outlets</i>	<i>Minimum no. of items</i>
1979	63	142	1,000		
1989	100	141	1,400		
1990	132	182			
2000	176	197			
2002	165	178			
2004	200	209	100-500		
2005	220	227			
2006	187	120			
2006/7	204	204	120	657	24,004

Seizures

Table 87 shows the number of ivory seizures made in the USA reported to ETIS from 1990 to 2006. No seizures were reported to ETIS by the USA for 1989 and 2007 up to March, and the 2006 data are incomplete. The ETIS data make no distinction between ivory from Asian and African elephants. The seized ivory statistics include the countries that were either the countries of origin, transit, export or re-export, or the reported destination for the ivory in question.

Table 87
Number of ivory seizures in ETIS for the USA (to 5 March 2007)

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
452	264	234	172	112	199	218	194	221	182	227	185	157	148	172	174	3	3,314

Source: Milliken, *et al.* 2007

The USA has by far the most seizures of ivory reported to ETIS by any country. Between 1998 and 2006, the years ETIS uses in its analysis, the USA (10,817 kg) ranked ninth behind China (39,375 kg), Tanzania (27,686 kg), Hong Kong (14,695 kg), Kenya (13,418 kg), Zambia (13,556 kg), Japan (12,425 kg), Nigeria (11,312 kg) and Singapore (10,895 kg) in total weight of ivory seized (Tom Milliken, TRAFFIC, pers. comm., October 2007). The ETIS analysis indicated that the weights of ivory seized annually have not increased in recent years in the USA. In the first half of the reporting period (1990-1997) there were 1,845 ivory seizures made and in the second half (1998-2006) there were 1,469 seizures. If one assumes all things to be equal (e.g. level of vigilance, accuracy of reporting, methods of ivory shipment, etc.) this would appear to indicate that attempted illicit ivory imports have dropped off marginally in recent years, though complete 2006 data, when received, may narrow the difference. The continued large number of seizures indicates as well, however, that a demand for ivory persists in the USA, even if, as the



ETIS report presumes, a high proportion of the seizures made were personal effects lacking the correct paperwork, especially jewellery.

Table 88 shows the numbers of raw and worked ivory items seized as reported by the database between 1995 and 18 July 2007. The USFWS reported 9,356 pieces and 13.8 kg of ivory seized. It should be recalled that ETIS records the number of individual seizure cases, while USFWS records the number of items seized. Since 2003, there appears to be a decrease in the number of items seized per year. This trend is consistent with the ETIS data, though even more pronounced.

Table 88
Number of raw and worked ivory items seized in the USA, 1995-18 July 2007

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
450	1,181	605	1,009	1,093	579	1,386	1,108	407	550	462	353	173	9,356
	+			+		+	+	+			+		+
	~8kg			~.5kg		~1.5kg	1.2kg	2.3kg			.275kg		~13.8kg

Source: Williamson (2004); analysis of USFWS LEMIS Database, *in litt.*, July 2007

Prices of raw ivory

The USA price of raw ivory rose about 30% in 1990, the year after the CITES ivory trade ban came into effect. Since 1990 prices for 3-kg tusks, and presumably other raw ivory categories, have approximately doubled (ivory craftsmen, pers. comm., 2006), though in inflation adjusted terms the price has risen very little (see Table 86). The price has gone up only marginally since 2000 from USD 132-198/kg (HSUS 2002) to USD 154-231/kg (see Table 1), a rise of approximately 17%, which is about the same as inflation in the USA for the same period. This seems to demonstrate that ivory supply and demand have remained fairly stable in recent years. This conclusion is consistent with the seizure data that show no increase in the number of cases in recent years.

Craftsmen

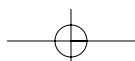
The estimated number of ivory craftsmen declined sharply from 1,400 in 1989 to 100-500 in 2004, and has reduced to only about 120-200 in 2006/7 (Thomsen 1989; Williamson pers. comm., May 2007). Williamson’s 2004 estimate, however, of up to 500 artisans is probably too high (craftsmen, pers. comm., 2006/7). Most artisans use materials other than elephant ivory, especially mammoth ivory, hippo teeth and warthog tusks. Very few craftsmen work solely elephant ivory.

The average craftsman used roughly the same annual amount of ivory from 1989 to 2006/7. Thomsen estimated 5 kg/artisan per year, or seven tonnes a year in total (Thomsen 1989). The few craftsmen who would give information on how much ivory they used in 2005 or 2006 put the figure at 5-11 kg each annually. Thus, if there is a minimum of 120 ivory artisans in the USA and on average each uses 8 kg a year, then the minimum total annual consumption of ivory is 960 kg. This figure is a minimum and readers should treat it with caution as it is based on only a few artisans’ reports.

Retail outlets and prices

Shop owners and managers believe that the numbers of retail outlets selling ivory items declined from 1989 to 2006/7, although no hard data exists before this 2006 survey. This decline was due to the ban on imports, the overall decrease in demand, and a reduction in the number of collectors.

The four previous studies of the ivory trade in the USA by Halligan (1979), Thomsen (1989), HSUS (2002) and Williamson (2004) give almost no information on prices of ivory objects nor on numbers of retail outlets, thus no trends can be calculated. The latter two reports do give prices from the Internet, but the authors could not check if the items were real ivory or not.



DISCUSSION

Law enforcement efforts in the USA

The USA has a good record for enforcing CITES and US regulations concerning ivory and other wildlife trade at its borders. The ETIS report (Milliken *et al.* 2007) noted USA effectiveness in this regard. The USFWS forensics laboratory (<http://www.lab.fws.gov/html>) is developing various technical methods by which ivory from African and Asian elephants and mammoths can be distinguished, and it has prepared an online manual that deals exclusively with all types of ivory identification by visual inspection (<http://www.lab.fws.gov/ivory/>). Since the mislabelling of elephant ivory as mammoth ivory is a method smugglers use to import illicit ivory, application of these techniques will help to control illegal ivory imports and apprehend offenders.

The lack of proper surveillance of source and purpose codes given to ivory imports is a problem. By current US law, people can only import, with correct permits, pre-Convention antiques, personal effects (for no commercial use) and trophy tusks under source codes respectively. A minority of imported tusks or raw ivory pieces bears these source codes.

The main weaknesses in the control of illicit ivory sales are imports, interstate movement of Internet purchased items and the lack of inspection of retail outlets for illicit ivory. The responsibility for the importation of ivory falls to the US Customs and Border Protection department, the USFWS and the US Department of Agriculture, Animal and Plant Health Inspection Service. Millions of packages posted abroad arrive in the USA every day, and many that contain ivory are not marked according to the ESA and Lacey Act. Many do not arrive at ports designated by the USFWS as wildlife product entry points. The same applies to goods arriving by sea in containers. Tens of thousands of visitors and returning residents also arrive every day at American airports, seaports and border crossings. One can understand the difficulty of finding illicit ivory under these circumstances. National interstate movements of ivory go virtually unchecked by any federal agency.

State authorities are responsible for the inspection of retail outlets and other businesses that might deal in ivory. They have rarely made seizures. Ivory is sold openly in markets, shops and periodic antique fairs. In places where the probability of illegal ivory being sold is high (e.g. San Francisco, Los Angeles, Honolulu), state agencies should work with the USFWS to conduct spot inspections.

CITES Resolution Conf. 10.10 (Rev. CoP14) recommended that Parties that import and trade elephant ivory implement several trade regulation and control measures (see INTRODUCTION section). The USA has not yet implemented any of the recommendations.

The sources and movement of tusks

Until 1989 and with proper documentation, bringing raw tusks into the USA legally was easy. After that, the only imports allowed were of antique tusks and hunting trophies. Between 1990 and 2005 3,530 tusks and 2,400 raw pieces of ivory came into the USA (Williamson 2004; UNEP-WCMC CITES Trade Database, *in litt.*, June 2007). Ivory craftsmen in the USA bought some of these tusks. No one knows how many.

It is unlikely, however, that smugglers bring many tusks into the USA. The supplies of raw, semi-worked and broken ivory pieces within the country are adequate for the ivory craftsmen's needs. Furthermore, since raw ivory is cheaper in the USA than in Asia or Europe traders have little incentive to smuggle in tusks.

Movement of worked ivory

Imports

Large quantities of worked ivory enter the USA every year legally, most of it labelled as antiques. Table 87 shows that between 100 and 200 seizures of illegal ivory are made every year, a small proportion of the shipments entering the USA. Individuals probably smuggle a significant quantity as personal effects, and other pieces enter by post and courier in mislabelled packages. This investigation discovered several Web sites based outside the USA that sell worked ivory to American customers. TRAFFIC (Williamson 2004) described the various ways legal and illegal worked ivory enters the USA, and the Environmental Investigation Agency (EIA) found that Chinese dealers shipped worked ivory to the USA and other countries labelled as 'crafts' or 'bone' (EIA 2007). The EIA found that the USA was a main destination for illegal shipments of worked Chinese ivory (EIA 2007). The Chinese-owned

wholesaler on Broadway in Los Angeles and the Japanese-owned warehouse in Honolulu mentioned in their respective sections are current examples of illegal importation of worked ivory into the USA.

Internal movements

Government agencies keep no statistics on ivory moving within the USA, but it is likely that worked ivory movements are frequent. Customers buy ivory, on the Internet or at auction or from antique-dealers, from sellers who live in different states who simply send the items by post or United Parcel Service (UPS).

Ivory substitutes

The carving of ivory substitutes in the USA

At least 14 other animal products can substitute for elephant ivory (see Table 89).

Table 89

Ivory substitutes used by craftsmen in the USA

<i>Material</i>	<i>Size/weight</i>	<i>Price in USD</i>
Cow bone	Average	0.91/kg
Deer antler	Average	0.91/kg
Elk antler	Average	4.50-5.50/kg
Camel bone	0.9kg	14/kg
Giraffe leg bone	3.6kg-72cm	28/kg
Water buffalo horn	Average	30 each
Steller's sea cow rib bone (extinct)	1.02kg	98/kg
Warthog tusk	Small/medium	55-165/kg
Large	0.22kg-32cm	250/kg
Elk teeth	Average	115 each
Mammoth tusk (extinct)		
a) good grades	Average	165-250/kg
b) poor grades	Average	26-125/kg
c) whole tusks	22-114kg	64/kg
Hippo tooth* *		
a) lower canine	Average	74/kg
Large		225 each
b) upper canine	24cm	133 each
c) incisor	Average	220/kg
39cm		163/kg
Walrus tusk*	2.7kg-50cm	220-331/kg
3.3kg-85cm		335/kg
Sperm whale tooth*	0.57kg-21cm	716/kg
0.68kg		1,027-1,173/kg
Narwhal tusk*		
a) average quality	4kg-180cm	100/2.5cm (1inch)
b) exceptional quality	3.9kg-183cm	214/2.5cm or 4,000/kg

* CITES Appendix I

** CITES Appendix II

N.B. Ivory from protected/threatened species, particularly marine mammals, should not be promoted. Fossilized whale teeth and fossilized walrus tusks are permitted without restrictions.

The most expensive alternative to elephant ivory is narwhal tusk (CITES Appendix I). This comes from the male narwhal (an arctic whale) and is a single modified upper incisor that grows forward from the face. Craftsmen buy tusks or tusk pieces from the Internet and from antique shows. Collectors pay USD 7,200 wholesale for an average tusk of 180 cm (USD 225/2.5 cm). Ones longer than 180 cm with fine spiral markings may sell for two to three times this price wholesale. According to Bobby Mann (pers. comm., 2006), a freak pair of narwhal tusks from one animal sold in Los Angeles in 2006 for USD 199,000. Rare and particularly expensive narwhal tusks are kept



whole for decoration and not carved. Craftsmen make knife handles and salt and pepper shakers out of the cheaper narwhal tusks. Inuits also carve items out of them.

Sperm whale teeth (CITES Appendix I) can be quite large at 20 cm and are the most expensive ivory substitutes per kg following the narwhal tusk. They average USD 700-1,200/kg. An unusually large one (1.36 kg) can sell for USD 20,000 (Robert Weisblut, ivory collector and editor of the *International Ivory Society Newsletter*; pers. comm., November 2006). Such a tooth would not be carved but kept for display. Scrimshaw artists carve the smaller ones.

Walrus tusks (CITES Appendix I), which are two modified upper canines, are more expensive than elephant ivory. The largest ones weigh up to 5 kg and are 92 cm long. Fossilized walrus tusks with blue and green colours are even more expensive than ordinary walrus tusks. Knife-handle makers and carvers use them (Mann, pers. comm., 2006).

Restorers use hippo teeth (CITES Appendix II), especially the two lower canines that can weigh 2.7 kg and extend to 45 cm. These canines, depending on size and quality sell for around USD 200/kg, about the same price as elephant ivory, because the craftsmen say they take polish extremely well and are hard. On the other hand they tend to crack and split.

The most common substitute is the mammoth tusk, but there are problems as this material is brittle and can have dark brownish or blue-green marks caused by iron phosphate called vivianite (Espinoza and Mann 2000). The heaviest pair of tusks that the investigators heard about was found in Nebraska in 1915 weighing 226 kg and the heaviest single tusk was found in New Mexico weighing 171 kg (Mann, pers. comm., 2006). For comparison, the heaviest single elephant tusk recorded weighed about 100 kg. Most of the mammoth tusks originate from Russia where they are found preserved in the tundra. Each year Russians come to Tucson, Arizona for the Gem and Mineral Show and bring raw mammoth tusks for sale. They also sell these tusks elsewhere across the country. The highest quality mammoth tusks sell for about the same price as elephant ivory – around USD 220-250/kg. These days many new netsukes and knife handles made in the USA are of mammoth ivory. The fossilized outer bark of the tusk is prized for knife and pistol handles. As mammoths are extinct, this ivory suffers no legal restrictions.

Elk teeth can be used by carvers, but they are small. They are thus limited in use but are occasionally made into jewellery, especially rings.

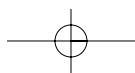
Warthog tusks (not on a CITES Appendix) are usually cheaper than elephant ivory. Most tusks are small and sell for around USD 55/kg on the Internet. Craftsmen use them mostly for making walking-stick handles, corkscrew handles and bracelets.

Craftsmen also buy bones from the extinct Steller's sea cow, a large aquatic mammal that used to live in the Bering Sea. The animal used to reach at least 7.5 m in length. Europeans discovered it in 1741 and Russian sealers hunted it for food and fur, but they had exterminated the estimated total population of 5,000 by 1768. Nowadays, Inuits dig up the bones and sell them over the Internet. They are in demand for carving, especially the larger bones such as the ribs, as they are solid and heavy. Knife-handle makers use them.

Of the cheap materials, very occasionally craftsmen buy water buffalo horns. One restorer said he considered ivory the superior material, but he also uses substitutes to do some restoring, especially if he requires cheaper or larger pieces. He uses giraffe leg bones to repair long objects, such as a swift (which holds silk or wool). A dealer who imports giraffe bones from Africa says he sells wholesale to craftsmen by the piece for USD 28/kg. Camel bone, which craftsmen in Egypt and China carve extensively as an ivory substitute, is also only rarely used in the USA. The restorer mentioned above has just starting experimenting with camel bone, however. In the past, some craftsmen carved the knee caps from a camel's rear legs to make chess pieces, but this restorer has not obtained these. Cow bones are cheap, but the restorer finds their use limited as they are thin and short. He does not use much mammoth ivory because the colour is often not right for the work he requires and he has difficulties grinding it. Restorers more often carve even cheaper materials, such as elk antlers and deer antlers. Elk antlers are more decorative and thus more expensive, while deer antlers are smaller. The cheapest material is cow bone that sells for less than a dollar a kg. This is the most commonly used of the cheap materials. The bones are thin, hollow, limited in size and not very attractive because the surface has tiny holes and the bone cavity is spongy (Burack 1984). They are used for knife handles and for inlay work.

Ivory substitute items for retail sale

Ivory substitute items for sale in the USA are nearly all from China. The investigators did not normally quantify the number of items made from animal products other than elephant ivory, but some general remarks are relevant. The most common substitute is mammoth ivory, which is carved into a variety of items, especially netsukes. Most mammoth ivory netsukes seen were new and imported from China. They are often as intricately carved as new elephant ivory netsukes. They were priced at a few hundred dollars each. San Francisco Bay Area had the most mammoth ivory items, especially netsukes, of which 2,000-3,000 were for sale, along with huge, elaborately carved





figures and tusks. New York City and Greater Los Angeles also had more than a thousand mammoth pieces each, and Honolulu, Dallas and Houston each had dozens of mammoth ivory items for sale. The shops that sold the largest amounts of ivory in the eastern USA did not display new mammoth ivory as their customers do not want it. They were more commonly seen in gift shops. A flea market had 41 new pieces selling for as low USD 50 at one stall owned and managed by a recent Chinese immigrant. In a New York City shop, among the more expensive items, was a pair of recently polished mammoth tusks weighing 136 kg for USD 150,000. A 180-cm tusk carved in northern China in the 19th century was offered for USD 120,000. A scenic piece (a composite of people and trees) 15 cm long that was carved in China was selling for USD 750. Also made in China were various mammoth ivory figures and figurines. In the eastern USA, except one shop in Palm Beach, we saw little mammoth ivory.

American visitors frequently buy mammoth ivory items in China and Hong Kong and bring them home, but do not seem to resell them in the shops. Chinese businessmen flying to the USA sometimes bring in from China some of the cheaper netsukes seen for sale in New York City and San Francisco Bay Area.

In many China Towns of the USA retail outlets were selling recently-made Chinese figurines of resin and cow bone. Chinese-managed shops elsewhere in the cities surveyed also sometimes sold cow bone items. An American businessman in Florida (of Western origin) buys cow bone items made in southern China, such as tusks, figures and furniture, and sells them in quantities from his large shop to both wholesale and retail clients.

Hippo teeth items, the majority Chinese-made, are occasionally found in retail outlets, especially in New York City and Greater Miami. Most are netsukes, but some are figurines.

No carved narwhal tusks were seen, but an occasional full narwhal tusk was for sale. In New York City, a European vendor at an antique fair had three such tusks for sale; one measuring 240 cm was USD 23,000 – too high in price and it did not sell.

Views on the CITES 1990 ivory ban and the 1999 ivory auction

Those vendors and craftsmen asked about the CITES international ivory trade ban were aware of it, and most believed that it did lower ivory demand within the USA after 1989. Before the late 1980s and the publicity campaign concerning elephant poaching and ivory trade, ivory was popular in the USA. That popularity has declined. The 1999 CITES-approved ivory auction in southern Africa did not affect people's attitudes concerning ivory, nor did it influence ivory demand in the USA. Three studies, using different methodologies, could not find evidence that the 1999 ivory auction affected elephant poaching nor ivory demand anywhere (Stiles 2004; Milliken *et al.* 2004; Bulte *et al.* 2007).

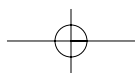
Most ivory craftsmen asked thought that the USA should permit a legal and regulated international ivory trade. A common view was that natural elephant mortality and the shooting of problem elephants produced enough ivory to supply the global markets, which would eliminate the demand for ivory from poached elephants. None of the vendors and craftsmen spoken to said that they would knowingly buy or sell ivory from poached elephants, but that it was difficult to know the age and source of most raw and worked ivory. Most craftsmen opposed a total ban on ivory sales in the USA, but others do not use elephant ivory in their carving work because of their concern about bad publicity affecting their business.

Craftsmen's and vendors' views on ivory markets and their future

Craftsmen in the United States see no point in making ivory figurines and figures and similar works of art because labour is too expensive and similar items are readily and cheaply available on the Internet, in shops, art fairs or exhibitions. Repair work, however, does have a future because the USA holds so many ivory objects. There is also a future in part-time jobs with ivory, such as producing billiard cue parts, inlaying billiard cues, manufacturing knife and pistol handles, making musical instrument parts, making ornamental scrimshaw items and crafting jewellery. All these require only small amounts of ivory each year. Craftsmen who use wood, mammoth ivory and silver will continue carving ivory if the other materials provide enough work for them. This is probable, as restoration work especially will always be in demand.

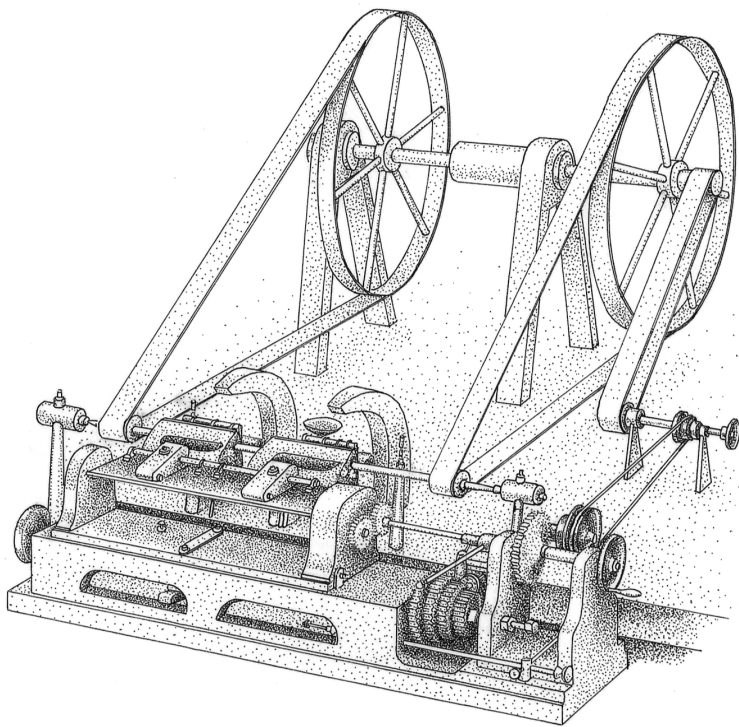
The small ivory requirements of craftsmen in the USA are easily satisfied. The Internet, which has revolutionized the ivory business, offers many old ornamental tusks and broken ivory items every day, which they can use for making new items and for restoration work.

Concerning the vendors' views in the USA, overall they are not optimistic about future sales of ivory. The public are no longer so interested in buying ivory as conservationists and the media have made ivory unpopular since the international ivory ban in 1990. The periodic antique fairs and weekend markets are recycling much of the existing ivory in the USA, reducing demand for new items made by American craftsmen. Vendors are also aware that many ivory collectors are old and will not be replaced. Fewer young collectors are taking their place because

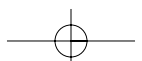




ivory is no longer fashionable and because imports nowadays require much paper work. Perhaps the ivory business is still fairly active in the Palm Beach area as some collectors from the New York area have moved to Florida and many wealthy people go there for holidays and to shop. Nevertheless, except for Honolulu and San Francisco with their large East Asian communities, the residents of other cities show little interest in ivory. Vendors in the USA also now have to compete with the rise of the Internet where sellers post hundreds of ivory items for sale daily. The few remaining ivory buyers prefer to browse on the Internet at home rather than go out to visit retail outlets. In most cities in the USA, ivory sales are down and will likely remain so.



Ivory comb-making machine, Connecticut, early 19th century



CONCLUSIONS

Domestic markets

Raw ivory

The US Government has no stockpile of raw ivory and has never taken a census of the raw ivory held in private hands. Raw ivory is readily available to purchase on the Internet from Web site businesses based in the USA and craftsmen interviewed did not complain about a shortage. Individuals also sell tusks through craftsman networks. Many sport-hunted trophy tusks enter the USA every year. Selling these tusks that are not pre-Convention in age or using them commercially in any way is illegal under CITES, ESA and AECA regulations, but the fact that auctions, ivory-dealer Web sites and antique markets continue to offer tusks, suggests that trophies and other privately-owned tusks are being sold.

Craftsmen on average use an estimated 8 kg of ivory a year. No evidence suggests that the USA has increased its use of raw ivory in recent years.

Worked ivory

The USA has the second largest retail ivory market in the world, second only to China (including Hong Kong). Local ivory production by American craftsmen and a steady inflow of thousands of items classified as antiques maintain this market. In the western USA, mainly Honolulu and San Francisco, large quantities of imported and probably recently-made jewellery were seen.

For the country as a whole, almost one-third (7,400) of the ivory objects seen could possibly have been made after 1989 and if so would have been imported illegally. Most were from China. In the eastern USA about 10% of the 15,062 ivory items seen appeared to have been manufactured after 1989, while in western USA well over 50% of the 8,942 ivory items seen could have been made after 1989. In the cities surveyed in western USA, possibly post-1989 items ranged from 35% to 89%. Oahu had the highest proportion of possibly recently-made items, followed by Los Angeles and San Francisco. That most antique ivory buyers and collectors who seek older pieces live on the East Coast might explain the difference. The East Coast also had a higher share of the more expensive Japanese ivory items, reinforcing the idea that most serious ivory buyers are in the East.

The USA also exports worked ivory mostly crafted abroad. Between 1995 and June 2007 the USA exported over 11,000 ivory pieces, with over half going to the UK, followed by Japan (11%) and Germany (4%) (Williamson 2004); USFWS LEMIS Database, *in litt.*, July 2007).

Local ivory production by American craftsmen today is modest compared with its heyday in the 19th century. In general, American craftsmen produce ivory knife and pistol handles, billiard cue parts, scrimshawed pieces and jewellery.

Since there were no systematic data of worked ivory markets in the USA before this study, it was not possible to determine trends, but anecdotal information from informants suggests that worked ivory demand dropped after 1989 but has stabilized in recent years. The main change is a shift by consumers to buying ivory on the Internet rather than in shops and markets.

International implications

Movement of ivory

Relative to the size of the USA's population and economy, little raw ivory enters the country legally or illegally (based on seizures). From this perspective, the US ivory market does not appear a significant threat to elephant populations.

The annual import of worked ivory could be having a worse effect on elephants, depending on what proportion of the ivory that enters the USA, both legally and illegally, comes from recently killed elephants. This import figure amounts to over 3,000 items on average each year (see 'Imported worked ivory' in the 'Status of the Ivory Trade in the USA' chapter). The deceptions that are used to sell and import ivory into the USA strongly suggest that some of this material is illegal and comes from recently poached elephants. For example, ivory consignments are sometimes mislabelled as antiques, mammoth ivory or bone; and they may be concealed amongst other products. The US CITES Management Authority (i.e. USFWS) should be more vigilant in scrutinizing and

approving ivory imports into the USA, particularly when either the source or purpose code does not conform with CITES and ESA regulations. State and federal conservation agencies should also make spot inspections of known outlets and periodic markets that sell ivory.

Relative scale of the USA ivory market compared to other markets

Table 90 shows key indicators for the largest 15 ivory markets surveyed by various investigators. Hong Kong no doubt still tops the list, even though the last survey was carried out in 2004, and mainland China would probably rank much higher in 2007 than it did in 2002, as many more outlets were selling ivory in Guangzhou in 2004 (Martin 2006) than were seen in 2002 by Martin and Stiles (2003). China also has the largest number of ivory craftsmen of any country in the world. The numbers for Cameroon are probably much lower in 2007 because of a government crack down on ivory traders in recent years (The Last Great Ape Organization 2006; Anon. 2007). The USA most likely ranks second in scale after China (including Hong Kong) in the size of its ivory market at the global level, followed by Thailand in third place.

Table 90

A ranking of ivory markets in the main cities of Africa, Asia, Europe and the USA

<i>Place</i>	<i>Minimum no. of items</i>	<i>Minimum no. of outlets</i>	<i>Estimated no. of craftsmen</i>	<i>Year of survey</i>
Mainland China/ Hong Kong*	47,044	202	200-300	2002/2004
USA	24,004	657	120-200	2006/2007
Thailand	21,459	201	40-50	2006/2007
Zimbabwe	20,475	33	30	1999
Germany	16,444	188	8-10	2004
Angola**	~11,600	41	?	2005
Sudan	>11,000	50	150	2005
Côte d'Ivoire***	~11,000	62	88	2003
Egypt	10,709	130	25-50	2005
Ethiopia	9,996	54	10-20	1999
UK	8,325	776	0	2004
Japan	7,565	138	~107	2002
South Africa	7,386	73	1-3	1999
Cameroon	6,015	43	50	1999
Myanmar	5,801	53	55	2001

* The figures for China (Martin and Stiles 2003) and Hong Kong (Martin 2006) have been combined.

**Milliken *et al.* (2006) gave only weights for the outlets. The number of items was estimated from the weight of 1,573 kg.

***For Côte d'Ivoire the number of items was estimated from weight, as Courouble *et al.* (2003) did not give the number of items. They estimated a weight of 1,496 kg in Abidjan, while Martin and Stiles (2000) estimated 2,748 kg. If the average weight per item remained about constant, one could say that Abidjan would have had perhaps 11,000 ivory items in 2003, about half the number seen in 1999 by Martin and Stiles (2000).

Sources: Martin and Stiles (2000, 2002, 2003, 2005), Courouble *et al.* (2003), Martin and Milliken (2005), Martin (2005), Martin (2006), Milliken *et al.* (2006) and Stiles (in press)

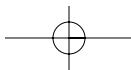
However, the sampling intensity was not equal between countries and the total number of items seen is therefore biased towards those countries where more cities and outlets were visited. For example, 16 towns and cities were surveyed in the USA and only four cities were in China/Hong Kong. If sampling intensity and the number of large cities are taken into consideration, China would be even further in first place. Also, the UK, Japan and Nigeria would move up in the rankings. It must also be stressed that the Table represents the number of items, not the estimated weight of the ivory observed. Many small items clearly could be less significant than a moderate number of large ivory objects.



Effect of the USA's ivory market on elephant populations

This survey found that the great majority of ivory being sold in 2006/2007 in the eastern USA pre-dated the USA and CITES African ivory trade bans. Therefore, in principle, if it were African ivory it was legal, though many items lacked proper documentation as called for by the ESA. The sale of this pre-ban ivory was not the result of recent elephant poaching and therefore does not directly affect elephant populations. A much larger proportion of the ivory seen for sale in the western USA appeared to be of post-1989 manufacture and import into the USA, and thus illegal. Most of the ivory purchased on Internet sites from vendors based outside the USA is also recent. Recently-made ivory items bought by Americans must have a detrimental effect on elephant populations, but the data is insufficient to quantify its degree. A 2002 TRAFFIC study reached the same conclusion (Williamson 2004). In addition, American hunters bring back to the USA trophy tusks from elephants they legally shot in Africa. Although technically not part of the USA's ivory market, these dozens of elephants killed annually by American hunters must have some detrimental effect on elephant conservation, though the sport-hunting industry maintains that careful selection of older bulls as targets does not affect elephant fertility or overall population numbers.

Based on ivory seizures reported by the USFWS and ETIS, only small amounts of presumably recent ivory are entering the USA today and most is intended for non-commercial, personal use. This ivory does have a small detrimental effect on elephant populations, as much of it most likely originated from illegally killed elephants, since seized worked ivory is presumably not antique and seized raw ivory is presumably not pre-Convention. It is hoped that the quantities remain small and that enforcement officers remain vigilant.



ANNEX

VANCOUVER (CANADA)

Vancouver, British Columbia, has a population of about 600,000 people, with a further 500,000 living contiguously. Vancouver was surveyed mainly because of its large East Asian population and their family connections with Hong Kong and San Francisco. Also, in March 2005 police arrested a Chinese Canadian man in Vancouver for illegally importing African ivory from Hong Kong and for possessing ivory with the intention to sell. Both contravene the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA), the law by which Canada implements CITES.

A total of 234 ivory items was found in 45 outlets. Twenty-seven of those outlets were in four antique markets and one annual antique fair. Table 91 shows a breakdown of the types of outlets and numbers of ivory items seen in Vancouver.

Table 91

Types of retail outlets and number of ivory items surveyed in Vancouver, May 2006

<i>Type</i>	<i>No. of outlets with ivory</i>	<i>% of total</i>	<i>No. of items</i>	<i>Av. no. of items per outlet</i>
Antique market	27	60	136	5
Antique shop	18	40	98	5
<u>Total</u>	<u>45</u>	<u>100</u>	<u>234</u>	<u>5</u>

The most commonly seen items were jewellery with 48 items (21%) followed in order by human figurines (15%), chess pieces (14%), netsukes (12%), eating utensil handles (4%) and cigarette holders (4%) (see Table 92). Of the 190 items that could be attributed to place of origin, 83 (44%) were from China, 31 (16%) were from East Asia, 29 (15%) were North American (USA/Canada), 21 (11%) were from Europe, 20 (11%) were from Japan, 4 (2%) were from the Democratic Republic of Congo and 2 (1%) were from Thailand.

Table 92

Ivory items seen for retail sale in Vancouver, May 2006

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Jewellery	48	21
(Bangle 0.5-1cm)	11	5)
(Bangle 2cm)	2	1)
(Bracelet with clasp)	5	2)
(Necklace, large beads)	5	2)
(Necklace, small beads with pendant)	2	1)
(Necklace, 2 solid plaques)	1	<1)
(Pendant)	8	3)
(Brooch)	10	4)
(Earrings, pair)	3	1)
(Ring)	1	<1)
Human figurine	36	15
Chess piece	32	14
Netsuke	29	12
Eating utensil handle	10	4
Cigarette holder	9	4
Box	8	3



Table 92 continued

<i>Item</i>	<i>No. of items</i>	<i>Percentage of total</i>
Paperknife	8	3
Noh mask	6	3
Vase	6	3
Napkin ring	5	2
Serving knife handle	4	2
Carved plaque	3	1
Animal figurine	3	1
Knife/sword handle	3	1
Coffee pot with ivory handles	3	1
Crochet hook/knitting needle	1	<1
Misc.	20	9
<u>Total</u>	<u>234</u>	<u>100</u>

Recently-made (post-1989) ivory items in Vancouver

Of the 234 ivory items found in Vancouver, 123 (53%) appeared to be made before 1989, and 99 (42%) could possibly have been post-1989 in age. Two of the possibly recently-made items were from Thailand and the rest were East Asian.

Antique markets in Vancouver

Five markets with 27 outlets selling ivory were found (see Tables 93 and 94). One was the Kerrisdale Antique Fair held in a Vancouver suburb every May.

Table 93

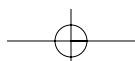
Number of retail outlets in markets seen with ivory items in Vancouver, May 2006

<i>Name of market</i>	<i>No. of outlets (approx.)</i>	<i>No. with ivory</i>	<i>% with ivory (approx.)</i>
Hampshire Antiques	15	3	20
Kerrisdale Antique Fair	58	14	24
Red Barn	50	1	2
Shaughnessy	40	5	14
Vancouver Antique Center	25	4	16
<u>Total</u>	<u>188</u>	<u>27</u>	<u>14</u>

Table 94

Number of ivory items seen in Vancouver markets, May 2006

<i>Name of market</i>	<i>No. of items</i>
Hampshire Antiques	8
Kerrisdale Antique Fair	45
Red Barn	1
Shaughnessy	62
Vancouver Antique Center	20
<u>Total</u>	<u>136</u>





Hampshire Antiques

On Granville Street, this small market had about 15 dealers, three of them selling a total of eight ivory items. Five netsukes ranged from USD 225 to USD 550, a 35-cm snake and a 26-cm spoon, both from the DRC, were USD 200 each, an 8-cm needle case was USD 85 and a pair of 25-cm carved hippo tusks was USD 640. Also on offer and marked as ivory were a resin netsuke priced at USD 95, and a bone paperknife at USD 125.

Kerrisdale Antique Fair

Vancouver holds an antique fair in the Kerrisdale Arena on the corner of East Boulevard and 41st Avenue in May every year. In 2006, 58 stalls were selling antiques and collectibles. The vendors came from various parts of British Columbia, one from Alberta and another from Quebec. Fourteen of them were selling a total of 45 ivory items, with 21 jewellery items, six human figurines, four containers and other miscellaneous items. A large bead necklace was priced at USD 500, two 16-cm Chinese human figurines were USD 400 each, an 8-cm erotic netsuke was USD 600 and a 14-cm tall, filigreed lamp was USD 250. Carved bone and walrus ivory pieces were also on offer.

Red Barn

This sprawling old building advertises itself as the largest antique market in western Canada. It is in Surrey, a town to the southeast of Vancouver south of the Fraser River. In spite of its great size and about 50 outlets, only one ivory item was found, an 8-cm Chinese vase with calligraphy painted on it priced at USD 650.

Shaughnessy

Shaughnessy consisted of an antique market with about 40 vendors on Granville Street in the South Granville area. The market had five outlets that sold 62 ivory items, including five jewellery items, eight human figurines (a pair of 20-cm figurines carved in Europe of Mary and Joseph was priced at USD 1,000), three netsukes, six 6-9 cm Japanese Noh masks, a pair of 16-cm Chinese vases (USD 600/pair) and a chess set (USD 1,650). Four bone jewellery pieces were marked as ivory. There were also 37 mammoth ivory items and many walrus ivory carvings and scrimshawed whale teeth.

Vancouver Antique Center

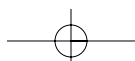
This medium size market with about 25 dealers had four outlets that were selling 20 ivory items. There were five jewellery pieces, seven Chinese figurines, three Chinese netsukes, two paperknives, two cigarette holders and a crochet hook. One outlet had a bone bracelet marked as ivory. The five mammoth ivory netsukes seen were USD 225-325 each.

Antique shops in Vancouver

The 18 antique shops spread throughout Vancouver offered a total of 98 ivory items. Two shops in the Pan Pacific Hotel on Canada Place sold high quality ivory. One was Chinese owned and had 12 East Asian ivory pieces, including two 8- and 9-cm Japanese figurines (USD 2,588 and USD 2,988), a 25-cm Edo period Geisha figurine (USD 14,350), a 14-cm Chinese Laughing Buddha (USD 3,200), six signed Japanese Meiji period netsukes (USD 2,250-7,500), a 7-cm painted carved plaque and a 13-cm vase with calligraphy on it. The owner said that she went to New York and even Europe to buy quality items at estate and antique auctions. She said that she could provide documents stating that the pieces were antiques, but she did not have CITES documents. The other shop also had 12 ivory items, including four jewellery items, four East Asian figurines, three netsukes and a 7-cm container. A 22-cm Japanese figurine was priced at USD 4,500 and a Chinese netsuke was USD 220, while a Japanese Meiji period netsuke was USD 4,500.

Granville Street in South Granville had several antique shops, four of which sold ivory. One, owned by a Chinese man, specialized in European items and had six ivory pieces, including a 20-cm English coffee pot with ivory handles (USD 5,600), a tea caddy spoon with a 13-cm ivory handle (USD 265), a 41-cm English paperknife with an ivory blade and silver handle (USD 345) and two 19-cm Austrian silver coffee pots with ivory handles (USD 1,200 each). An exclusive German-owned shop had two small, carved 14th-16th century European plaques and a 27-cm ivory vase with ivory flowers.

The Main Street Antique Row also had several antique shops, but only two sold ivory. They stocked just a few uninteresting pieces such as bangles, necklaces (large beads at USD 500), napkin rings, utensils with ivory handles and so on. A curious antique shop specializing in swords and knives on Richards Street had a 19th century British-made Mameluke sword with an ivory handle (USD 895) and a Prussian Naval officer's sword with an ivory handle (USD 595). Another antique shop on Howe Street was selling two interesting figurines from the DRC, one 32-cm high for USD 995 and the other 42-cm tall for USD 1,250. It also had a DRC gold and glass necklace with a 4-cm ivory mask pendant.



The only place in Vancouver's China Town selling ivory was a jewellery shop with two Thai 4-cm Buddha pendants at USD 65 each. This survey dispelled the notion that Vancouver's China Town ivory market might resemble that of San Francisco. One shop, however, had large, decorated 'lucky yak bone' pieces carved to look like tusks priced at up to USD 1,890.

Retail prices in Vancouver

Table 95 shows the prices for various items seen in Vancouver.

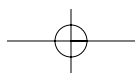
Table 95
Retail prices for ivory items seen in Vancouver, May 2006

<i>Item</i>	<i>Size in cm</i>	<i>Where made</i>	<i>Price range in USD</i>
JEWELLERY			
Bangle	1	?	40-90
Bracelet	3	?	55-125
Brooch	7-9	?	39-125
Necklace, large beads		China	225-420
		?	500
Pendant	7	China	59
	4	South East Asia	65
	3	?	65
Ring		China	65
FIGURINES			
Animal	35	Africa	200
Human	5-10	China	495
		Japan	2,588-2,988
	11-20	China	400-3,200
		Europe	500
	21-30	Japan	4,500-14,350
	31-40	Africa	995-1,250
Netsuke	3-8	East Asia	220-600
	5-10	Japan	2,250-7,500
Noh mask	7	Japan	250
MISC.			
Box	8-13	China	89-299
Chess set (32pcs)	5-14	East Asia	1,650
Cigarette holder	12-13	East Asia	55-85
Crochet hook handle	9	North America	5
Paperknife	14	East Asia	100
	30	Europe	345
Knife/sword & handle	12-16	Europe	595-895
Napkin ring		North America	35
Spoon	26	Africa	200
Vase	16-22	China	300-695



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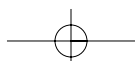
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