



**WILDLIFE SHIPMENTS WERE DENIED ENTRY** to the United States from at least 214 countries and territories worldwide between 2005 and 2014, according to data from the U.S. Fish and Wildlife Service (FWS) Law Enforcement Management Information System (LEMIS). To get a better understanding of this data, Defenders of Wildlife looked closely at the trade routes used for these shipments.

### Top 5 Trade Routes

The top five trade routes used for shipments of wildlife denied entry to the United States (Table 1) emerged from an analysis of shipments exported from 214 countries and territories and denied entry at all 64 U.S. ports. Notably, three of the ports of entry (El Paso, Laredo and Nogales) are not designated for the import or export of wildlife. Together, these five routes were used by 18.5 percent of all illegal wildlife shipments entering the United States in the last decade.

**Table 1. Top 5 Trade Routes**

Rank	Country of Export	Port of Entry	Number of Shipments	Percentage of Shipments
1	Mexico	El Paso, TX	3,614	7.3%
2	Mexico	Nogales, AZ	1,616	3.2%
3	China	San Francisco, CA	1,557	3.1%
4	China	Anchorage, AK	1,296	2.6%
5	Mexico	Laredo, TX	1,151	2.3%

### Volume

Table 1 shows the top five trade routes ranked according to the number of shipments detained. However, examining the contents of these shipments more closely and ranking them by volume alters the order of the top five routes (Tables 2 and 3). The route from China to Anchorage, which ranked fourth in terms of shipments, ranks first in terms of the number of products. The route from Mexico to Nogales, which ranks second in terms of shipments, ranks first in terms of pounds, but last in terms of number of products.

**Table 2. Top 5 Trade Routes by Number of Products**

Rank	Route	Number of Products
1	China → Anchorage, AK	427,763
2	China → San Francisco, CA	128,883
3	Mexico → El Paso, TX	35,212
4	Mexico → Laredo, TX	13,435
5	Mexico → Nogales, AZ	1,531

**Table 3. Top 5 Trade Routes by Weight**

Rank	Route	Pounds
1	Mexico → Nogales, AZ	75,883
2	China → San Francisco, CA	5,182
3	Mexico → Laredo, TX	3,227
4	China → Anchorage, AK	1,235
5	Mexico → El Paso, TX	606

### Products

Each trade route appeared to have a predominant product type in terms of volume (Figure 1). From China to Anchorage, **hair products** made mostly from weasel hair were most common. From China to San Francisco, **medicinal products**, mainly derived from seahorses, predominated. From Mexico to El Paso it was **powder**, mostly made from rattlesnakes; from Mexico to Laredo, **shoes**, primarily made of caiman leather; and from Mexico to Nogales, **dead animals**—mainly frogs.

**Figure 1. Predominant Product Types by Trade Route**



### Genera

For each trade route one particular genus was most common. For some it was a genus that could be considered more ordinary, such as *Crotalus* (**rattlesnake**) in the route from Mexico to El Paso and *Odocoileus* (**white-tailed deer**) in the routes from Mexico to Nogales and from Mexico to Laredo. Other trade routes showed a more exotic predominant genus such as *Saiga* (**antelope**) in the route from China to San Francisco, and *Pinctada* (**oyster**) in the route from China to Anchorage.

## TRENDS IN TRADE ROUTES OF GLOBAL WILDLIFE IMPORTS DENIED ENTRY TO THE UNITED STATES

For each of the five routes, both the genus and species information was incomplete to varying degrees. The route from China to Anchorage showed the highest percentage of incomplete segments (26.2 percent) with incomplete genus information. The route from Mexico to El Paso had the highest percentage of segments with incomplete species information—67.6 percent.

### Source of Products

The order of the top five trade routes shifts again in terms of the percentage of segments containing products sourced from the wild (Table 5). Segments from the route from China to Anchorage contained products almost exclusively sourced from the wild, while segments from the China to San Francisco route were roughly half wild-sourced and half captive-sourced segments.

**Table 5. Wild-Sourced Segments in Top 5 Trade Routes**

Rank	Route	Percentage of Wild-sourced Segments
1	China → Anchorage, AK	99.2%
2	Mexico → Nogales, AZ	97.0%
3	Mexico → El Paso, TX	85.2%
4	Mexico → Laredo, TX	69.5%
5	China → San Francisco, CA	52.6%

### Country of Origin

The country of origin refers to the country from which items originated and is not necessarily the country from which the shipment was exported. Interestingly, the percentage of segments containing items that originated in the same country as the country of export varied greatly depending on the trade route (Table 6). The route from Mexico to Laredo had the highest percentage of segments containing items that also originated in Mexico (94.3 percent). Alternatively, the route from China to San Francisco had the lowest percentage

**Table 6. Country of Origin for Top 5 Trade Routes**

Rank	Route	Percentage of Segments Originating in Export Country
1	Mexico → Laredo, TX	94.3%
2	Mexico → Nogales, AZ	92.8%
3	Mexico → El Paso, TX	69.7%
4	China → Anchorage, AK	29.9%
5	China → San Francisco, CA	12.9%

of segments containing items that also originated in China (12.9 percent). This indicates that items found in this trade route frequently originate in countries other than China and that China is a collection hub for shipments heading to the United States.

### Purpose of Imports

In all but one trade route, China to Anchorage, the majority of segments were imported for personal purposes. In the route from China to Anchorage the vast majority of segments, 92 percent, was imported for commercial purposes with only 6.8 percent declared as personal and the remaining 1.2 percent imported for scientific purposes (Table 7).

**Table 7. Personal Imports in Top 5 Trade Routes**

Rank	Route	Percentage of Personal Imports by Segments
1	Mexico → Nogales, AZ	92.6%
2	Mexico → El Paso, TX	88.1%
3	Mexico → Laredo, TX	84.2%
4	China → San Francisco, CA	67.8%
5	China → Anchorage, AK	6.8%

### Live Animals

The volume and occurrence of live animals (including animals that died during shipment) in each trade route varied greatly (Table 8). Although the route from China to San Francisco had the second-lowest number of segments containing live animals (18), it had the highest volume of animals (696). This indicates that a small number of shipments from China to San Francisco contain high concentrations of live animals, while other routes—such as Mexico to Nogales—see higher frequencies of shipments, but much lower volumes of live animals.

**Table 8. Live Animals in the Top 5 Trade Routes**

Route	Number of Segments	Number of Animals
Mexico → El Paso, TX	64	116
Mexico → Nogales, AZ	220	351
China → San Francisco, CA	18	696
China → Anchorage, AK	7	221
Mexico → Laredo, TX	70	125

For more information please contact: Alejandra Goyenechea, [agoyenechea@defenders.org](mailto:agoyenechea@defenders.org)

For updates, visit [www.defenders.org/combating-wildlife-trafficking](http://www.defenders.org/combating-wildlife-trafficking)