

## Commodity Spotlight



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## Mexican Cattle Exports to U.S.: Current Perspectives

For generations, cattle have played a key role in bilateral trade between the U.S. and Mexico. Cattle account for nearly all U.S. livestock imports from Mexico and 5-10 percent of U.S. agricultural imports from Mexico. The composition of cattle trade has remained relatively constant over the years: the U.S. exports breeding stock and cattle for slaughter to Mexico, while Mexico exports primarily feeder cattle (young stock to finish gaining weight in feedlots) to the U.S. Cattle are exported to the U.S. as forage supplies in Mexico decline seasonally.

The relationship among all industry players is unusually strong. Cattle producers in Mexico, cattle brokers in the border region, and cattle buyers in the U.S. have maintained close links through decades of political and economic upheaval, drought, and impediments to trade imposed by both the U.S. and Mexican governments. Some ranchers (or their extended families) even produce cattle in both countries.

Since implementation of the North American Free Trade Agreement (NAFTA) in 1994, total agricultural trade between Mexico and the U.S. has grown steadily. However, given a long history of firmly established business relationships and relatively free movement of people and ani-

mals across the border, U.S.-Mexico cattle trade has not been affected substantially. Since 1994, cattle trade between the two countries has been affected more by Mexican economic events, drought, and Mexican export regulations requiring an export license. Imports of feeder cattle from Mexico, for instance, are not notably different now than in the early 1990s. The outlook for U.S.-Mexico cattle trade remains favorable, as Mexican ranchers become increasingly sophisticated in producing and marketing cattle to send across the border.

The history of U.S. imports of Mexican feeder cattle can be divided into three periods: 1961-84, 1985-95, and 1996-2000. In the first period, policy shifts by the Mexican government on cattle exports and U.S. concerns about disease and parasites made for a relatively unstable trade environment. From 1985 to 1995, U.S. imports more than tripled due to stabilization of the Mexican cattle industry, continued disease control efforts, and genetic improvements in Mexican herds.

In the mid-1990s, producers in northern Mexico faced extreme drought, economy-wide instability, and a dramatic devaluation of the peso—all of which led them to sell record numbers of Mexican feeder

cattle (1.6 million) to the U.S. in 1995. Following liquidation of that year's herd, the domestic supply contracted and the number of animals entering the U.S. the next year decreased 72 percent to 456,000. Imports have gradually recovered since then and in 2000 reached 1.2 million animals.

In 1999, feeder cattle from Mexico made up about 5 percent of the U.S. inventory of calves weighing less than 500 pounds and 7 percent of the entire stock of U.S. cattle and calves on feed (13.2 million animals). Annual Mexican feeder cattle exports to the U.S. typically amount to 3-5 percent of Mexico's total inventory of cattle.

According to the Mexican government, the number of feeder cattle exported depends on rainfall, related forage supplies, the Mexican cattle cycle (rise and fall of cattle inventory over time in response to changing prices), U.S. cattle market prices, exchange rates, and overall condition of the Mexican economy. Most feeder cattle destined for the U.S. market are steers; the extra veterinary costs involved in exporting spayed heifers keep their numbers relatively low. Although exact figures are not available, cattle used in rodeos account for an estimated 5 percent of Mexico's cattle exports to the U.S.

### *Feeder Cattle Ports of Entry*

Mexican feeder cattle currently cross into the U.S. through 10 major ports of entry along the U.S.-Mexico border: San Luis, Nogales, and Douglas (Arizona); Columbus and Santa Teresa (New Mexico); and Presidio, Del Rio, Eagle Pass, Laredo, and Hidalgo (Texas). An additional port in Sasabe (Arizona) processes very few, if any, cattle. The size and complexity of these ports of entry vary greatly. While Santa Teresa boasts a modern, state-of-the-art facility that can accommodate up to 10,000 cattle, significant improvements have been made at most other ports. Some continue to operate with limited and/or older cattle-handling facilities.

Cattle crossing facilities on the Mexican side of the border are supported and maintained by Mexican cattle producers, under the auspices of a regional cattlegrowers' association (*Union Ganadera*).

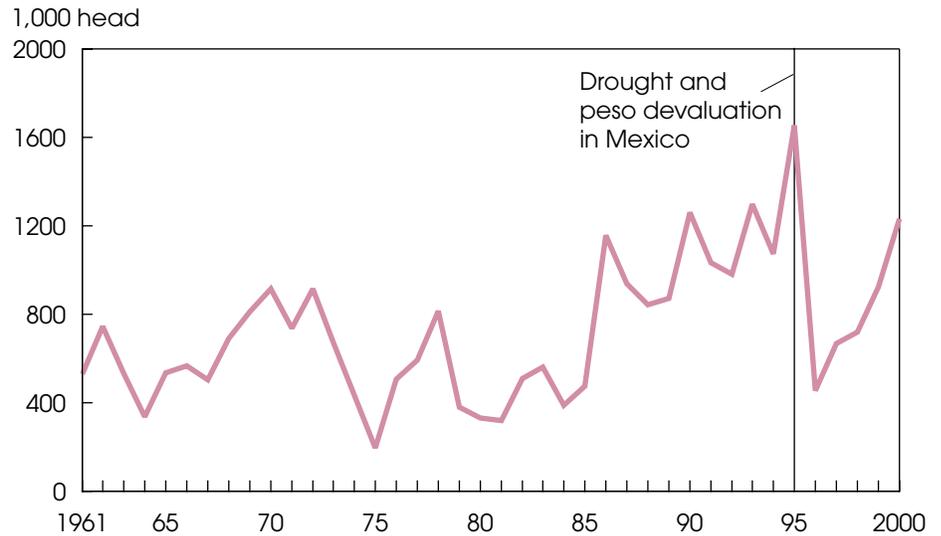
The Mexican cattlegrowers' associations are made up of rancher groups that operate within a particular Mexican state, and in many respects fulfill the same functions as state-level cattle rancher associations: U.S. state-level industry advocacy, political activity, and cattle marketing. However, they also function as traditional agricultural cooperatives by operating border crossing facilities, providing outlets for group marketing and education, manufacturing feed, and purchasing vaccines and other supplies in bulk for sale to members.

Cattle crossing facilities on the U.S. side of the border are operated primarily by private firms (in Arizona and Columbus, NM) and the Texas Department of Agriculture. However, at Santa Teresa, NM, Chihuahuan cattle producers operate both sides of the cattle port-of-entry.

Current U.S. health regulations regarding imports of cattle from Mexico are unchanged from the pre-NAFTA period: cattle must be free of pests and diseases, and test negative for tuberculosis (and for brucellosis in breeding cattle). To help ensure these requirements are met, the Mexican cattle rancher associations own and operate inspection facilities at each port of entry. Each facility is staffed by inspectors employed by USDA's Animal and Plant Health Inspection Service (APHIS), which collects user fees for its inspections from cattle brokers—who in turn charge the fee to the Mexican cattle producers.

When cattle are sold in the U.S., five or more fees may be associated with the transaction, including payments to Mexican customs brokers or inspectors, Mexican cattle brokers, the Mexican cattlegrower association (for expenses incurred at the crossing facility), U.S. customs brokers or inspectors, and a U.S. cattle broker. Mexican ranchers also pay \$1 per head for the U.S. beef checkoff program, which promotes beef consumption. Despite the amount of fees, the U.S. feeder cattle market is more financially attractive to producers than selling the animals domestically for beef, which must be transported to population centers in central Mexico.

### U.S. Cattle Imports from Mexico Are Moving Up Again



Economic Research Service, USDA

The Santa Teresa cattle crossing facility handles the largest volume of Mexican animals entering the U.S. (about 327,000 head in 2000). Mexican cattle spend approximately 24 to 48 hours at this port of entry, where the Mexican cattlegrower association feeds and waters them, and where they are inspected by APHIS. Mexican officials also review the animals' documentation. Some animals are quarantined in Mexico for further examination.

Approximately 3,000 to 4,000 animals are refused entry annually at the Santa Teresa facility. The typical basis for refused entry is failure to comply with U.S. or Mexican paperwork or regulations, such as ear tags and records that are not consistent, dipping certificates that are not in order, improper branding, evidence of open wounds or live ticks, or suspicions that the cattle in question may have been stolen in Mexico.

If animals pass the basic inspection, which is visual, tactile, and includes manual verification of castration, they are sent swimming through dipping vats of insecticide approximately 60 feet in length. The dipped, inspected animals are taken to holding pens and eventually released into an area that spans both the Mexican and U.S. borders. They then enter pens on the U.S. side of the border. Although they may spend some time in this facility while

awaiting transport, they have probably already been purchased on the U.S. side and will be loaded immediately onto cattle trailers destined for U.S. pastures or feedlots. At Santa Teresa, the cattle cross the border on foot. At most of the other ports, the cattle are loaded onto trucks after inspection in Mexico and taken across the border to the U.S. facility. There, they are unloaded and reloaded again before leaving the U.S. facility.

At ports of entry, cattle are priced according to current U.S. market rates and a pricing formula. Prices are set for a 300-pound animal (the approximate average weight of most feeder cattle imported from Mexico), and Mexican sellers are penalized one cent for every 10 pounds over the 300-pound baseline. If the offer price for steers entering from Mexico is \$1.13 per pound, for instance, a 400-pound animal is sold for \$1.03 per pound. (This system may create an incentive for Mexican producers to export their animals earlier than might be optimal, given local forage conditions.)

There is a distinct seasonal pattern in the timing of cattle imports from Mexico. Imports are lowest in summer because Mexican ranchers typically let their animals graze from spring until the first fall frost in the higher elevations. Within a month after the first frost, feeder animals

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begin moving to market, entering the U.S. during the winter and spring months. As frost progresses south and to the lower elevations in northern Mexico, animals there join the current flow of feeder calves into the U.S. market. This marketing pattern allows ranchers to take advantage of the warm-season grasses that grow on rangelands in northern Mexico and the U.S. Southwest.

Most cattle entering the U.S. originate from the Mexican states of Chihuahua, Coahuila, Durango, Nuevo Leon, and Tamaulipas. Cattle coming from Chihuahua, Coahuila, and Durango predominate at New Mexico and west Texas ports. Coahuila, Nuevo Leon, and Tamaulipas are the primary sources of cattle entering at the central and southern Texas ports. Sonora is likely the primary state of origin for cattle entering through Arizona ports. These cattle breeds are primarily English (Hereford and Angus) or mixed English, with some Brahma and English crosses (such as Brangus).

Cattle buyers at Santa Teresa have found that European crossbreeds are able to acclimate themselves to U.S. pastures and feedlots. These animals are also able to withstand the hot and dry conditions as well as extreme daily temperature variations of the northern Mexico desert regions. They are well-suited for finishing (the last stage of production before cattle emerge from the feedlot and are sent to beef packing plants) with grain in the U.S., and end up as quality beef bearing the grade of "select" or better. Many Mexican feeder cattle are the result of herd improvement programs using bulls and heifers (both registered and commercial) imported from the U.S.

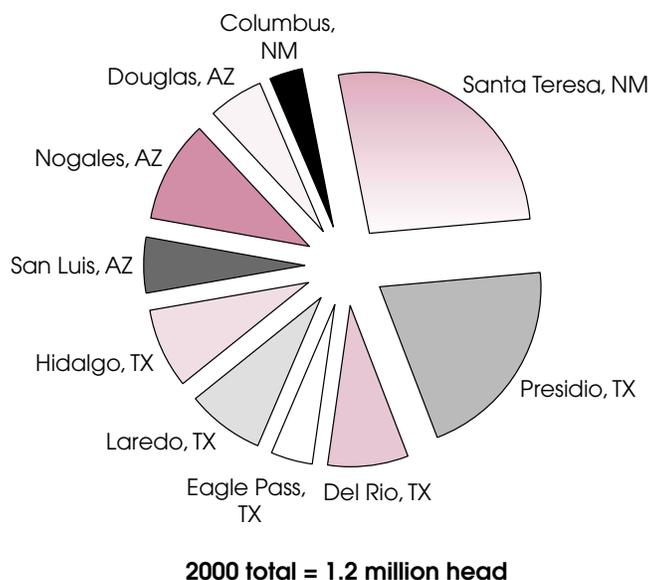
Importation records that are completed at U.S. ports of entry do not indicate the final destination of Mexican cattle. However, areas most commonly mentioned by individuals familiar with cattle marketing at New Mexico ports are the Texas Panhandle, northern Colorado, Oklahoma, northeastern New Mexico, Kansas, and California's Imperial Valley. Individuals working in or near the Texas ports of entry report that Texas, Nebraska, southeastern Colorado, the Imperial Valley, Oklahoma, New Mexico, Kansas, and Arizona are all destinations for imported

### U.S.-Mexico Border Regions



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### U.S. Cattle Imports from Mexico by Port



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cattle. Informants familiar with Arizona ports indicate that many of the cattle crossing at Nogales and San Luis remain in Arizona for feeding, but that cattle also go to California, west and central Texas, and Oklahoma for feeding. They also report that cattle crossing into Arizona are

sometimes sent to Idaho, South Dakota, and possibly Canada for feeding.

Given the pricing formula used at the border, most Mexican feeder cattle are relatively lightweight and so are destined primarily for small grain pastures and back-grounding in the U.S. (backgrounding

involves primarily a forage ration, which allows skeletal and muscle development without adding fat).

Winter small grain pastures throughout the Great Plains region draw imported cattle, and when plentiful supplies of this forage are available, there is increased demand at the border for the lightest Mexican animals (200-300 pounds). Heavier animals (weighing at least 500 pounds) go directly to feedlots.

Dissatisfaction with the efficiency of traditional U.S. border cattle marketing practices has recently led Mexican ranchers to explore alternatives to the current system that will increase pricing transparency and reduce the influence of middlemen in the marketing process. Some are electing to bring their smaller cattle into the U.S., retain ownership, and pay grazing fees. Others are delivering heavier cattle directly to U.S. feedlots and either retaining ownership or selling the animals there. Some of the regional cattlegrowers' associations are encouraging members to send their cattle to auctions in the U.S. instead of selling through port-of-entry cattle buyers. The *Union Ganadera de Chihuahua* is constructing an auction facility on the U.S. side of the border at Santa Teresa, with plans to develop video or satellite marketing arrangements.

### ***What Influences Movements of Cattle from Mexico?***

Because APHIS needs projections of monthly Mexican cattle imports to plan and allocate its inspection resources properly, it recently commissioned an evaluation of factors (e.g., prices, grazing conditions) influencing the movement of feeder cattle from Mexico to the U.S. The study, which used nine models, focused on 1994-98, with a 12-month lag in the impact of rainfall that effectively reduced the scope of the study to 1995-98. The

models use the ratio of nominal U.S. cattle prices to nominal Mexican cattle prices, both in dollars per cwt (the dollar/peso exchange rate was also incorporated into the models).

As data on Mexican pasture conditions are not available, measurements of accumulated rainfall served as proxies for grazing conditions. The rainfall variables used in each model were cumulative for 12 months, and lagged: for example, the rainfall observation for January 1995 was the sum of rainfall from January 1994 to December 1994, while the rainfall reported for February 1995 was the sum of rainfall from February 1994 to January 1995.

Research results helped confirm commonly held notions about the relationship between cattle prices and exports: As U.S. prices increase relative to Mexican prices (or as Mexican prices decrease relative to U.S. prices), Mexican cattle exports generally increase.

Results for the rainfall variables were not, however, consistently negative or positive. For instance, as rainfall in Chihuahua decreases, cattle volume at both ports in New Mexico (Columbus and Santa Teresa) increases. This result reflects the usual practice among Mexican cattle producers of liquidating their herds when confronted with drought and selling fewer cattle when grazing conditions are better.

Conversely, at the Presidio port of entry, cattle exports appear to be positively related to rainfall in Coahuila: the more rainfall, the more cattle are exported to the U.S. The same result applied for Nogales (port) and Sinaloa (state). In each of these cases, increasing amounts of available forage likely led farmers to raise more calves and to increase production—perhaps in part by importing cattle from other parts of Mexico. These imports may

also be among the factors explaining the positive relationship between precipitation and increased cattle exports from the region.

In the cases of Arizona's San Luis and Douglas ports, the traditional relationship between price and cattle exports did not appear to hold. This result may reflect longstanding market relationships between buyers in the U.S. and Mexican cattle producers or brokers or could be related to the geographic isolation (relative to large Mexican markets) of some Sinaloan and Sonoran producers.

### ***Looking Ahead***

Although relatively stable, cattle trade between the U.S. and Mexico will face periodic disruptions and perhaps bursts of unanticipated exports in the future. Cyclical economic and weather changes, for instance, may substantially affect the movement of feeder cattle from Mexico, even though this movement is in general quite consistent. Periodic economic turmoil in Mexico could result in dramatic spikes in cattle exports to the U.S., such as occurred in 1995.

The U.S. is expected to remain a major market for Mexican cattle producers as northern Mexico continues to raise cattle suited for feeding with seasonal forage supplies. Also, the Mexican cattle feeding industry is expected to remain small because there is limited domestic demand for premium beef. **AO**

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### **IN UPCOMING ISSUES OF AGRICULTURAL OUTLOOK**

- \* ANIMAL HEALTH ISSUES AFFECTING INDUSTRY AND CONSUMERS
- \* ISSUES IN ANIMAL WASTE DISPOSAL
- \* FORCES SHAPING SOUTH AMERICAN AGRICULTURE