

Beef Cattle Herd Survey, 2013

Island of Tinian,
Commonwealth of the Northern Mariana Islands



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2013 Tinian Beef Production Footprint

 Pastures shaded in Green are on Military leased lands

 Pastures shaded in Blue are on private lands



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Introduction and Background:

Tinian has a long history of Cattle Production. Cattle were first brought to Tinian by the Spanish in the 16th century. After the Spanish-Chamorro War, at a time when there were no Chamorro residents on the island, cattle were allowed to proliferate, providing an important source of protein for the incoming and outgoing Spanish galleons that voyaged across the great expanses of the Pacific Ocean.

The wild cattle herds on Tinian roamed this fertile land for a few hundred years and were described by Admiral Anson and his crew (circa 1753) as being entirely milky-white color, with only their ears being black, and numbered in the tens of thousands. As the administration of the island of Tinian was transferred from the Spanish to the Germans, the herds will still preserved and encouraged to grow and be harvested for their sustenance and for their monetary value as the German administration charged a slaughter fee for those who wished to purchase the animals for consumption. It was not until the Japanese administration of Tinian that the beef herds were greatly reduced as the island was put into sugarcane production. Even during this time, the Japanese grazed cattle in the newly harvested sugarcane fields to feed on the plant residues and fertilize the fields before they were planted again. After World War II, much of the island was leased to Ken Jones, who re-developed a beef and milking cattle program on Tinian, with over 7,000 beef cattle and 1,000 milking cow operation. Beef and milk products from this era were transported to Saipan, Guam, and other parts of the region for sale in retail grocery stores and military installations. Today, Tinian's cattle ranches are all family owned and operated, providing local residents with fresh beef for household consumption and traditional offerings for cultural events such as weddings, funerals, and fiestas.

The island of Tinian receives an average of approximately 81 inches of rain per year. About 75 percent of the island is grassland and secondary forest supporting grazing and pastured-livestock activities. With its flat lands, fertile soils (mostly Molosols), and large stores of water in underground water aquifers, Tinian is well-suited for cattle production and for many other types of Agriculture production.

Wet season: July to February, Dry season: March to June

Forages: Guinea grass (*Panicum maximum*), Elephant grass (*Pennisetum purpureum*) and tangan-tangan and improved varieties "Tarramba" and "Wondergraze" (*Leucaena leucocephala*).

Methods:

A list of beef cattle ranch operations was developed through the Northern Marianas College, Cooperative Research, Extension and Education Service (NMC-CREES) program and through the community network of the Tinian Cattlemen's Association. A brief survey questionnaire was developed to collect data on the herd size, specific stage of production, an estimate of beef marketed and grazing land area currently in production and future expansion plans. Included in the survey was an inquiry of the need to develop a USDA FSIS inspected slaughter operation for the island of Tinian.

Data was collected over a period of 3-months (December 2012 through February 2013) via personal face-to-face or telephone interviews.

Results:

Cattle and Calves: January 1 Inventory by sex classes and weight

Year	All Cattle and Calves	Beef Cows	Cow Replacements > 500 pounds	Steer > 500 pounds	Bulls > 500 pounds	Steers, Heifers, Bulls < 500 pounds
2013	1,043	517	157	81	52	211

Cattle and Calves: Number of operations, number and pounds sold, value of sales.

Year	Operations	Number sold*	Pounds sold**	Value of Sales***
2013	37	177	88,500	\$70,800

* Based on DNL R Slaughter Permits issued in 2012.

** Estimated live weight at time of sale = 500 pounds.

*** Average value of marketed animal is \$400.

Estimated Overall Herd Values(based on average live-weight Tinian market values for 2012)

	Beef Cows	Cow Replacements > 500 pounds	Steer > 500 pounds	Bulls > 500 pounds	Steers, Heifers, Bulls < 500 pounds
2013 Count	517	157	81	52	211
Ave. live-weight value	\$600	\$500	\$600	\$700	\$350
Total value	\$310,200	\$78,500	\$48,600	\$36,400	\$73,850

Total Estimated Tinian Herd Value for 2012: \$547,550.00

Grazing Lands

Year	Operations	In Production hectares	Future Expansion hectares	USDA Slaughter Needed
2013	37	742.5	325	32

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