

Gary & Sue Price 77 Ranch

Blooming Grove Texas, USA

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We started the ranch in 1976 from scratch with nothing but the desire to succeed. We want to tell our story of how we manage the ranch, raise our cattle and produce beef.

Gary Price



Introduction

In the USA there are approximately 727,000 beef farms and ranches, of these, 91% are family-owned or individually-operated and 11% are operated by women.

In 2016/17 there were approximately 93.5 million cattle in the USA — 31.2 million beef cows, 6.4 million beef replacement heifers, 9.35 million milking cows and 35 million calves. The average beef cow herd size in the US is 40 head of cattle.

Texas is by far the largest producing state in the USA with 248,800 farms and ranches covering 130.2 million acres, with an average farm size of 523 acres. Rural areas cover 84% of the entire state and over 98% of the farms and ranches are family or singularly owned. The state exported \$6.5 billion worth of agricultural products in 2012, of which beef contributed \$855 million. One in seven Texans are employed in an agricultural related industry.

There are just over 151,000 cattle ranches in Texas — 50,000 of these have less than 10 head, 70,000 have 10-49 head, 15,000 have 50-99 head and the remaining 16,000 have 100+ head.



325m

The United States of America (USA), is the third largest country in the world at 3.71 million square miles (9.63 million km²), with a population of just over 325 million people

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The USA is the largest supplier of beef into McDonald's

Gary & Sue Price

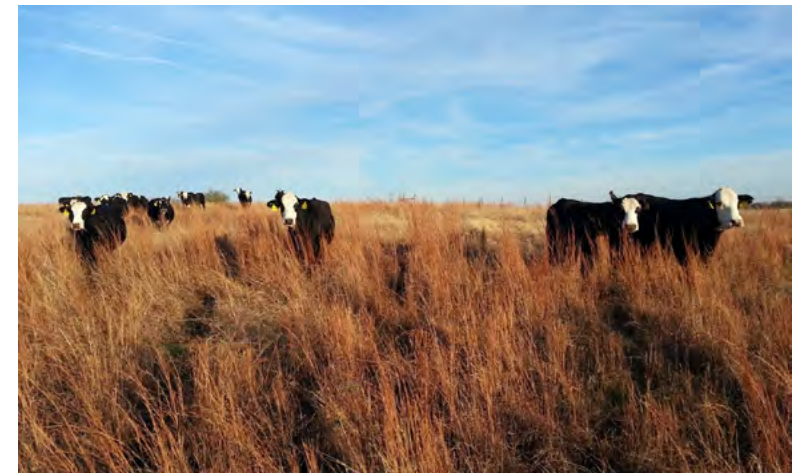
77 Ranch

The Great Plains refers to a band of prairie land which is 500 miles (800 km) wide and encompasses 12 US states and two Canadian Provinces from Texas to Alberta and covers 502,000 square miles (1.3 million km²).

The Great Plains are often vertically subdivided into distinct environments — with short grass prairies to the west, mid grass prairies to the center and tall grass prairies to the east.

The environment can be extreme — characterized by hot summer temperatures of 113°F (45°C) and extremely cold evenings and winters, where temperatures can plummet to as low as 14°F (-10°C). These extremes in temperature are often accompanied by low rainfall, flash floods, lightning and strong winds.

The extreme weather conditions explain why the landscape is dominated by grasslands. Flora such as the prickly pear, purple clover and soapweed yucca can be found throughout the prairies, but it is grasses such as the blue grama and buffalo grasses that dominate with approximately 450 native species. The roots of these native grasses can extend up to four meters below the surface — a natural trait which helps the prairie landscape to withstand soil erosion and the effects of extreme wind, rain and flash flooding. The dustbowl of 1930-1936 was the outcome of the loss of these habitats and land being cultivated for cropping.



Gary & Sue Price 77 Ranch

77 Ranch started in 1922 when Lee Low from San Saba came to Blooming Grove with a train car load of cattle and just one horse. Low drove the cattle south of the town and began to ranch.

In 1976 Gary and Sue Price sold a good horse which enabled them to make a down payment on 272 acres of land, purchased from their good friend Lee Low. Over the next 42 the couple added another 15 different adjacent properties to their cow calf operation bringing the total area owned to 2,200 acres, with an additional 400 acres being leased — the ranch extends to an area of 2,600 acres. Their son Gary Lee currently manages a large ranch north of Dallas — Fort Worth. In the future, Gary Lee will assume the day to day operation and management of 77 Ranch.

Gary Lee has purchased properties adjoining 77 Ranch and is employing the same management style and practices as his father.

The ranch is in the Blackland Prairie Ecoregion of Texas, named after its rich dark soils. The prairie runs for 300 miles (480 km) from the Red River in North Texas to San Antonio in the south. The soils and climate are well suited to crop production, which has led to the loss of 99% of this unique habitat, making this tallgrass prairie the most endangered large ecosystem in North America.

With great fortitude, commitment and vision, Gary and Sue have worked tirelessly to protect several hundred acres of this rare and unique native grass prairie. While building and developing a cow calf operation, the couple have focused on the key principles of sustainability, along with partnerships and shared values.



Gary and Sue's vision is to continually improve the ranch's natural resources, utilizing transparent production methods to support and highlight the integrity of cattle ranching and beef production. Aiming to control their cost to support the long-term viability and sustainability of the ranch.

Gary and Sue work in partnership with several industry institutions to learn new practices as well as share what they have learned. They have an open gate policy, with tours of the ranch, showcasing their practices as an example for those ranchers and land owners looking to adapt their own operations to be more sustainable.

The couple are now aiming to connect with consumers to provide the transparency they are now seeking.

In 2012 the ranch was the winner of the National NCBA Environmental Stewardship Award.

Core Values and Goals:

- Continue to grow the business, optimize efficiency and improve income
- Develop and grow the business in a highly sustainable way to protect and enhance it's natural assets and resources for the next and future generations
- Develop partnerships with key industry experts and advisors to ensure the ranch is everything it can be
- Be transparent in everything they do and be customer focused



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We started the ranch 42 years ago from scratch with nothing but the desire to succeed. We have discovered many opportunities along the way. Today, that desire to succeed and to be the best we can be, while sharing what we have learned with others is stronger than ever.

We want to leave the ranch to our son, Gary Lee, he shares our desire and wants to build on what we have started and to be his best.

We love ranching...it's our life.

Gary Price
Owner, 77 Ranch



Gary & Sue Price — 77 Ranch Sustainability Objectives

Environment

- Protect and enhance natural habitats in the most sustainable manner — to support the return of native flora and fauna, to increase ranch biodiversity
- Optimize pasture productivity and plant diversity via rotational and targeted grazing
- Increase the ecosystem services provided by the ranch
- Conserve and improve the health of soils
- Protect and conserve fragile and delicate environments and unique habitats
- Return cropped land to native grass prairie for grazing
- Conservation and retention of water — ensuring every drop of rainfall stays on the ranch

Economics

- Optimize cattle numbers with the ranch's environmental potential to improve efficiency and control costs

- Improve diversification income with the development and maintenance of native habitats and water ways — to support fishing and duck hunting
- Create and develop a sustainable business to support the next and future generations
- Ensure cattle genetics are selected to suit the environment of the ranch and optimize beef production

Ethics

- Focus on improving animal health & welfare via genetic improvements and management, such as pre-conditioning weaned calves prior to sale and introducing Brahman genetics into the dam-line
- Produce food (beef) safely and transparently
- Engage in outreach opportunities with the local community, as well as educational visits with youth groups
- Share best practice, learnings and knowledge with other ranchers and the beef industry



Blackland Prairie Preservation

77 Ranch has 275 acres of original native Blackland Prairie pasture. This land has never been plowed or planted and is now an important part of the ranch's beef cattle enterprise.

Gary and Sue continue to convert cropland back to pasture — planting native grasses and forbs. These unique and adapted species are key to the future of the ranch due to their ability to withstand the wide ranging environmental conditions encountered in this region.



Key Outcomes & Actions

- Helping to protect a habitat which is the most-endangered large ecosystem in North America
- Utilize the unique habitat of the prairie to produce human edible protein
- The ranch's habitat is allowing the re-introduction of the Bobwhite Quail
- Once established the quail can provide a valuable diversity income from hunting



Rotational Grazing

The ranch operates a rotational grazing policy, as this method has numerous advantages over continuous or set stocked grazing. The system involves moving the cattle through a series of 45 different pastures, which mimics the grazing pattern of bison — a species which roamed the plains in vast numbers up until 200 years ago. This method avoids over-grazing — providing more time for pasture recovery and regrowth. This respite is especially important during times of drought, ensuring the ranch is able to maintain and support sustainable livestock numbers.



Key Outcomes & Actions

- Helped maintain and increase plant diversity with over 180 different plant species identified
- Optimized forage intake for cattle, which in turn improves productivity and animal growth rates
- Over-grazing is avoided, plant growth and carbon sequestration is optimized
- Breaks parasite lifecycles reducing dependence on deworming
- Allows the ranch to be more drought tolerant due to controlled grazing



Resource Protection

Two areas acquired by Gary and Sue's son, Gary Lee, had serious soil erosion problems when first purchased. In one area, 18 acres were immediately taken out of crop production and seeded with a mixture of native grasses and forbs to create a riparian buffer zone. Now mature, this area has created an important wildlife corridor that provides habitat for ducks and other water fowl.

A second area of 40 acres, also suffering from extreme soil erosion, has been converted into a large wetland with help from Ducks Unlimited. This now provides an important natural resource and wildlife habitat, as well as additional income from outdoor enthusiasts and hunters.



Key Outcomes & Actions

- Sediment run-off from land adjacent to Mill Creek has been significantly reduced improving water quality
- Creek bank erosion stopped, and wildlife corridor created
- Additional income generated via duck hunting on wetland

Partnerships & Collaboration

Gary and Sue work in partnership with several private, public and governmental bodies. These relationships enable them to discover, inform and share new practices, ideas and concepts which can be incorporated into the day to day management and operation of the ranch.

This information can then be shared in a practical and demonstrable way with visiting ranchers or via Gary's input into industry boards.

Key Outcomes & Actions

- Working with key industry partners to gain knowledge, adapt management practices and improve ranch sustainability
- Provide facilities on a working ranch for industry stakeholders to trial and learn new practices
- Peer to peer knowledge transfer of new concepts and practices



Pre-Conditioning Calves

All calves are weaned, vaccinated and kept on the ranch for 45–90 days on average. This benefits the health and welfare of the calves as they are not transported and additionally stressed close to weaning.

This system also means cattle have at least one, or even two, less lifetime movements through other systems (sale barn & order buyer), which reduces costs and optimizes efficiency within the beef value chain.



Key Outcomes & Actions

- Delaying selling calves after weaning improves their health and welfare
- Reduces transportation costs/impacts as well as number of animal movements between ranch and feedlot
- Provides more flexibility in marketing cattle
- Increased value at sale
- Increased live-weight of 250-300lbs per calf prior to supply to feedlot



Genetic Improvements

The ranch's dam line has evolved from a ½ Hereford, ½ Brahman cow to a ¼ Hereford, ¼ Brahman, ½ Angus cow to aid in heat, humidity and parasite tolerance. Breeding provides a terminal cross that retains the Hereford and Brahman traits while producing a black calf. All decisions related to breeding and culling are affected by pasture and weather conditions, all part of a holistic decision making process.

The genetic improvements have boosted production by capitalizing on hybrid vigor, ensuring the cows are more suited to the ranch's environment. With more unpredictable and extreme weather patterns occurring, these cattle are more adaptive and more productive for the range of changeable ranch conditions.



Key Outcomes & Actions

- Cows are more heat and parasite tolerant
- Calves are still Certified Angus Beef, which allows them to maintain the market premium
- Mature cow weights are currently 1250 lbs. (570kg), with a target to reduce this to 1150 lbs. (520kg)
- Calf weaning weights are 650 to 675 lbs. (295–306kg) all pasture based with no creep supplement
- Target calving period is 45-60 days, depending on ranch conditions, in 2018 it averaged 75 days
- Calving percentage is 85-90%



Partnerships, Knowledge Exchange & Shared Values

Partnerships

Knowing that you don't have to 'go it alone' is crucial when making decisions about continuous improvement and sustainability practices – especially when you're taking your first steps.

Gary and Sue have worked in partnership with multiple stakeholders, industries, institutions and government bodies. These partnerships are based on working together to help discover and learn new practices and techniques — which can be incorporated into the day to day operation of the ranch, and ultimately shared in a practical and demonstrable way with other ranchers and land owners.

Gary and Sue have worked with Natural Resources Conservation Service, U.S. Fish & Wildlife, Holistic Management International, United States Department of Agriculture, Noble Research Institute, Texas Grazing Land Coalition, National Cattlemen's Beef Association, Texas & Southwestern Cattle Raisers Association, and the Texas Farm Bureau.

These partnerships have been a critical element for the couple, helping them acquire the knowledge and skills to identify important forbs, grasses and wildlife species — important indicators of rangeland health and biodiversity.



Partnerships

Gary and Sue worked in cooperation with Texas A&M University Agri-Life Research to install three water monitoring devices on the ranch. These devices are sited at three different points on the ranch and have collected five years of data on rainfall, runoff, infiltration and soil moisture. The site-specific data is continually analyzed to compare the differing effects of grazing, grass cover, ground temperature, brush density and brush species and their impact around water adsorption, and losses. The data is helping Gary and Sue make more informed decisions around pasture management and grazing. The information will go on to be used to help demonstrate to other ranchers and producers that their management decisions can have a positive impact on water conservation and ranch productivity.

The couple have been working with the Texas Parks & Wildlife Department, to reintroduce the Bobwhite Quail on the ranch. The cause of their original decline decades ago was the loss of their unique habitats — which were once maintained by grazing Bison and fire, which sustained the perfect level of plant species and habitats for these birds. The program has introduced wild caught breeding birds onto the ranch with the hope they stay and start to reproduce. Biologists from Texas Parks and Wildlife are monitoring bird populations with the help of radio transmitters to track their patterns and behaviors. This is an incredible achievement and testament to the environment and habitat which has been created on the ranch by the management and foresight of the owners.

The Noble Research Institute (NRI) has developed a Land Stewardship Program which provides information to ranchers and land owners to help support decision making on land management practices. For the past two years Gary has participated in the program utilizing the information to support his land management decisions. Gary's knowledge has also helped NRI develop and shape their Ecosystem Service Marketplace model, which aims to quantify the economic and ecological return on investment from managing land with a stewardship-based approach.

Knowledge Exchange & Shared Values

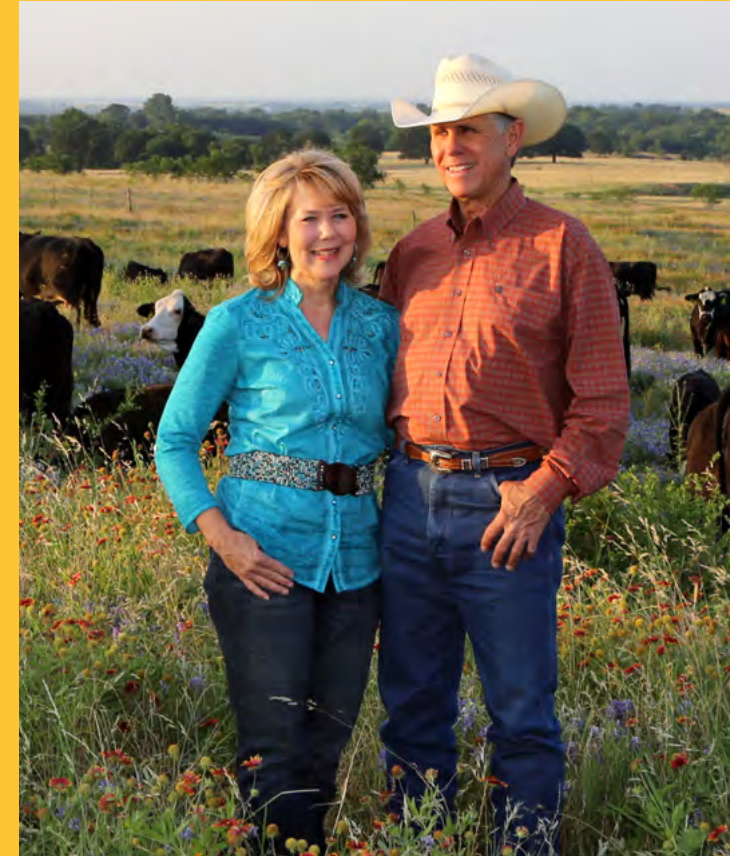
Sue taught third grade for 28 years in nearby Blooming Grove and retired in 2007. She is now overseeing several projects on the ranch and is a director with the [Texas Wildlife Association](#) helping with their [Learning Across New Dimensions in Science](#) (L.A.N.D.S.) program. The L.A.N.D.S. program brings 4th and 5th grade classes from Blooming Grove and the Dallas-Fort Worth metro area to the ranch to teach them about natural resources, water quality issues and where beef comes from. Sue teaches the students how the balance between cattle production and wildlife habitat enhancement can be achieved, whilst delivering against the ranches goals and vision to maintain its financial security and future.

Gary and Sue have an open gate policy, having hosted many tours with hundreds of people from both conservation and ranching organizations. Numerous producers continue to adopt management practices that were initially trialled and introduced on Gary and Sue's ranch.

Gary has served on many boards and wants to share what he has learned with other producers and land stewards. He is currently serving on four boards, one steering committee for a carbon sequestration project, and two pilot projects involving land stewardship certification and a five-year water monitoring project.

In the past Gary has worked with cattle feeders, cattle order buying companies, contractors undertaking ranch improvement projects and IMI Global — a third-party source, age and certification company.

In a unique partnership, Gary and Sue have worked closely with Miller Coors on many conservation projects on their ranch and in their community. Miller Coors is focused on water quality and has identified the benefit of working with ranchers and other land owners to the benefit of water quality and conservation to help with their sustainability objectives.



Actions



1

180 different plant species have been identified within the pastures on the ranch.



2

The unique habitats on the ranch has allowed the successful reintroduction of the Bobwhite Quail in conjunction with the Texas Parks & Wildlife Department.



3

Three water monitoring devices placed across the ranch have been set up to monitor rainfall, runoff, infiltration rates and soil moisture.

The results are being used to compare the effects of grazing, grass cover, brush density/species and ground temperature.

Dealing with Extremes

Temperatures at 77 Ranch range from 9 to 113°F (-13 to 45°C) — with average rainfall levels of 36 inches (91 cm). 2011 only saw rainfall levels of 24.5 inches (62cm) with 2018 receiving an above average total of 67 inches (170cm) but also included a 90 day period where only ½ inch of rain fell on the ranch. During this dry spell many pastures in the region were grazed too short, it then rained which created the perfect conditions for an outbreak of army worms. The pests ate the small amount of remaining vegetation, which meant that further rainfall created significant problems with soil erosion due to an absence of grass cover.

Managing the pastures at the 77 Ranch to capture as much rainfall as possible while ensuring they are resilient to drought has taken many years to understand and master. With the variations in the weather which are now being experienced, Gary and Sue appear to have developed a standard for sustainable ranching.

Gary Price — Applying a Stewardship Ethic

“I would advise other producers to first look at the ranch holistically, try to understand how to read the land, try not to worry about things out of your control — for example rainfall — but work on how to improve your ranch’s ability to retain that rainfall. Have a thorough understanding of plant identification and how to utilize those plants for grazing and wildlife habitat while improving them and making the ranch more drought resilient. Be sure that stocking rates are matched with forage availability and implement planned rotational grazing with a drought plan.

Understand that you are selling beef not just cattle, by getting to know your customers and the consumer better.”



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The new normal for our weather is no longer ‘average’, it now consists of wide variations of unpredictable and variable weather cycles including flooding and drought. The ranch’s pastures and our management must be prepared to handle these extremes.

Gary Price

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Consumers will always have questions about beef. Our future will depend on our ability to answer those questions with credibility and trust.

Gary Price

Contact

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