

Land Fragmentation

Texas' Open Spaces Rapidly Disappearing

article by Lorie Woodward Cantu

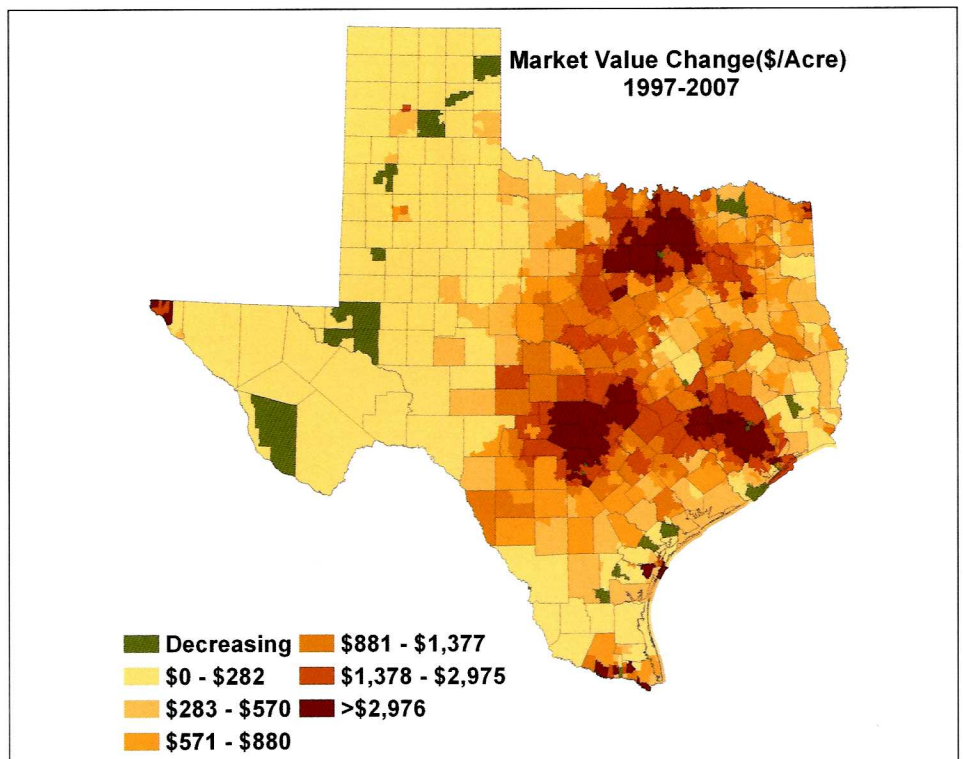
photos by Russell Graves

Maps Courtesy Texas Institute of Renewable Natural Resources, Texas A&M University

In the decade from 1997 through 2007, more than 2 million acres of open-space land was converted from use such as farming, often brought on by loss of profitability and rising land prices.

Between 1997 and 2007, 2.1 million acres of land in Texas were converted from open space to other uses, according to a recent study conducted by the Texas AgriLife Extension Service and the American Farmland Trust. The study, commissioned by the American Farmland Trust, updates and expands Texas Rural Lands: Trends and Implications for the 21st Century, a landmark study completed in 2003 also in cooperation with Texas AgriLife Extension Service.

"Conversion, which reflects the amount of open-space land removed from agricultural, forestry or wildlife valuations, represents the final phase of the land fragmentation process," said Dr. Neal Wilkins, professor and director of Texas A&M University's Institute of Renewable Natural Resources, who was responsible for the data analysis. "The process is kick-started when an agricultural operation loses its profitability, causing the owner to sell some of the land. Smaller ownerships require the owners to intensify their operations, which are then



Not surprisingly, nearly half of open-space land converted was in proximity to Texas' fastest-growing counties – those with rapidly increasing land values.



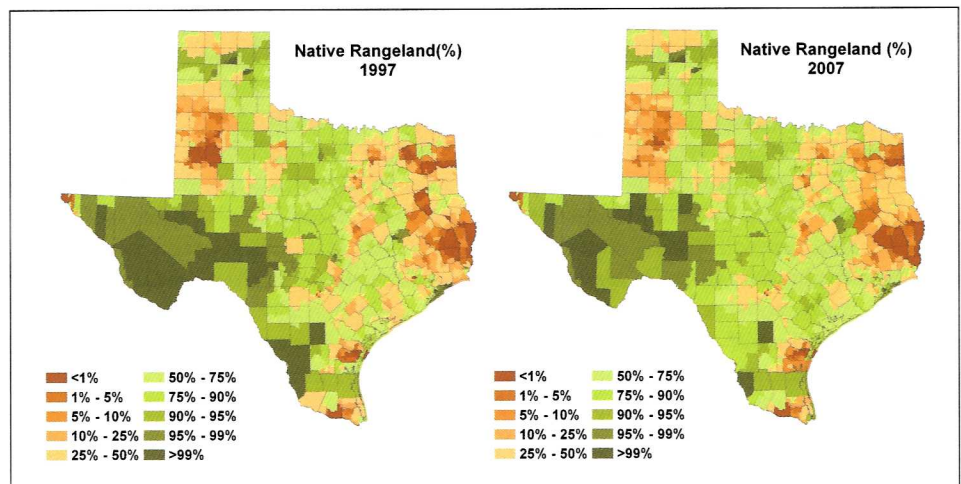
Texas lost 2.3 million acres of dryland row-crop land, which is especially vulnerable to weather and market conditions, making profitability even more difficult.

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Loss of profitability for traditional agriculture and rising land prices combined with unprecedented population growth, spiraling estate taxes and pressure from increasing property tax rates, have created a perfect storm of economic and social forces threatening private land ownership across the state.

“The rate of land conversion from agricultural, range and forestry lands was significantly higher in the 2007 study than in the 2003 study,” said Wilkins, who also serves as TWA vice president. “The prospects for loss in the future appear to be even more alarming because over the last several decades, large ownerships have been broken up into smaller ownerships, predisposing those lands for accelerated conversion.”

Of the land converted, approximately 40 percent of the conversion occurred in 25 of Texas’ highest-growth counties, accounting for 10 percent of the state’s land area. As expected, these counties lie in



Native rangeland dropped by some 5 million acres between 1997 and 2007. An alarming figure, but tempered by more than 2 million acres shifted to wildlife tax valuation after passage of Proposition 11 in 1996.

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The Blackland Prairie and High Plains regions of Texas are the two areas where landownership of large tracts increased. Ag in both areas benefits from economy of scale.

proximity to Texas' rapidly growing urban areas: Houston, the Metroplex, the I-35 Corridor, the Rio Grande Valley and El Paso.

Over the past 10 years, these high-growth counties have lost 149 acres of open-space land for every 1,000 people added to their population. According to Wilkins, if that conversion rate continues in Texas' 25 fastest-growing counties with the projected population for the next 10 years, the state will lose another 1.4 million acres in those counties alone.

In the study, conversion is defined as the permanent loss of open-space land removed from 1-D or 1-D-1 tax valuation and put to other uses. Fragmentation occurs when larger tracts are broken into smaller ones.

The fragmentation of open-space land is not limited to the suburbs of metropolitan areas. In fact, the break-up of large ownerships (those greater than 2,000 acres) is a continued trend in parts of the Trans-Pecos, Edwards Plateau and South Texas. These regions lost 1.2 million acres of large ownerships, an area larger than Bexar County, to fragmentation between 1997 and 2007.

"These areas, which have traditionally

been home to expansive ranches, have experienced a downturn in profitability, making them susceptible to the economic forces that drive fragmentation," Wilkins said. Texas also lost 2.3 million acres of dryland row crops, an ag sector that is particularly vulnerable to the vagaries of weather and the market, making profitability especially difficult.

As noted earlier, operators often have to offset a decrease in land size by intensifying their agricultural production, which can have other environmental ramifications. Between 1997 and 2007, the acreage dedicated to non-native pasture grass increased by three percent to approximately 11 million acres. While non-native pasture grasses can support higher grazing intensity for livestock, the introduction of non-native grasses can substantially alter wildlife habitat.

During the same period of time, the records show that Texas lost almost 5 million acres of native rangeland. While this figure is startling, Wilkins said, it is not as alarming as it first appears because this total includes part of the 2.3 million acres that has been shifted to wildlife tax valuation since that became an option in 1996. Also much of the 1.8

million acres that has been converted to non-native grasses was actually native rangeland 10 years ago.

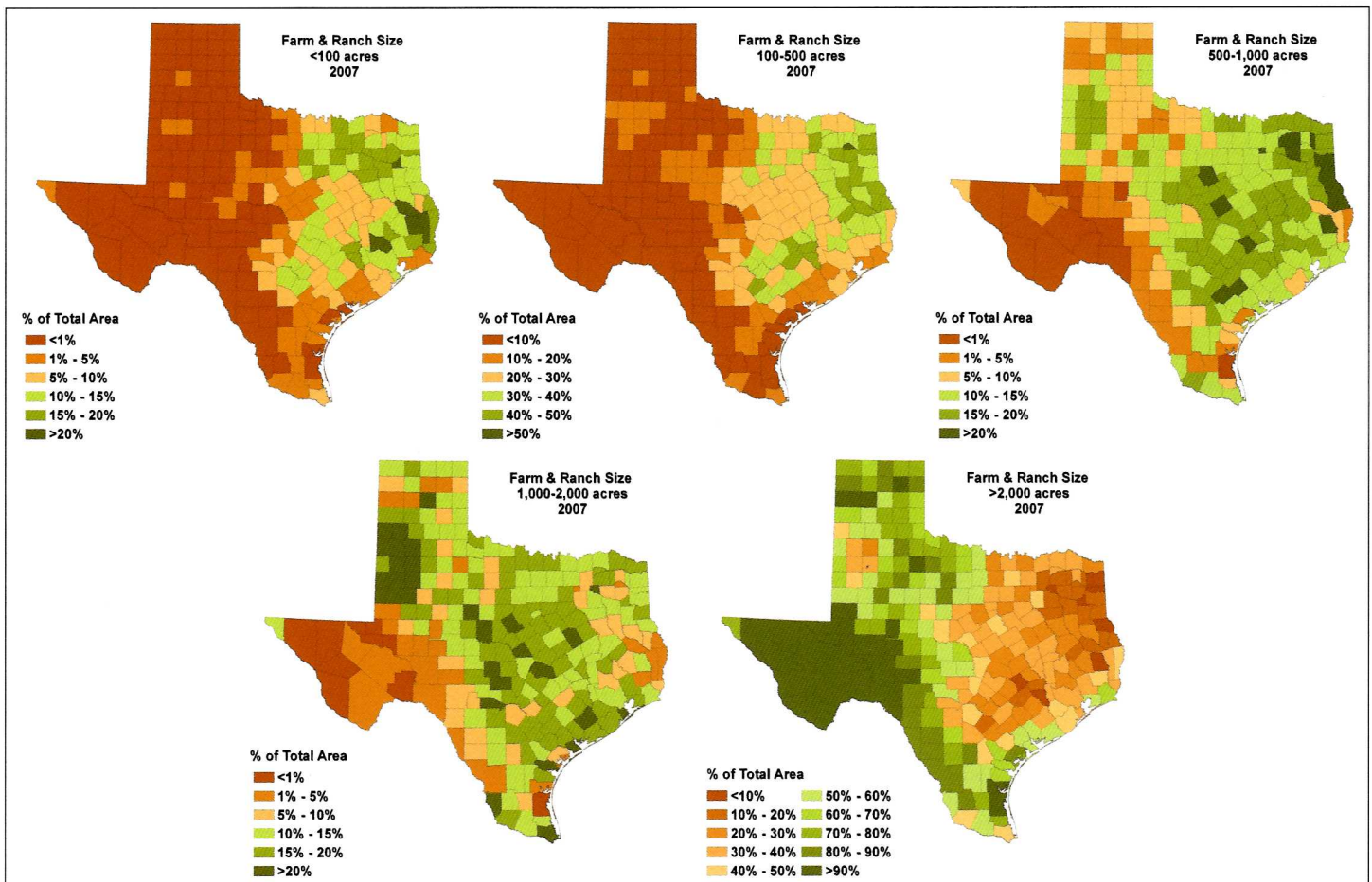
"The passage of Proposition 11 in 1996 and the advent of wildlife valuation have obviously given landowners another option for keeping land open and productive," Wilkins said. "Revenue from outdoor recreation is another income stream that can help keep operations profitable, ensuring that the gate stays closed to development."

For the first time, the study identified a trend of land consolidation in areas where large-scale agriculture is profitable. Large ownerships (in excess of 2,000 acres) increased by 800,000 acres between 1997 and 2007. The Blackland Prairie and the High Plains, where agriculture benefits from economy of scale, gained almost 350,000 acres of large ownerships.

Profitability can be a bulwark against market forces, Wilkins said. If an operation is profitable, there is less reason for operators to sell their land at any price.

High Land Prices Affect the Landscape

In Texas, between 1997 and 2007, the price of rural land rose astronomically. Throughout the Edwards Plateau, land values have increased as much as 250 per-



Farm and ranch sizes: the rate of fragmentation is related to rising land prices and vice versa. Chopping up large chunks of rural land into smaller bits increases the buyer pool and price per acre.

cent; along the I-35 Corridor, values have increased by 100 percent. Even more isolated areas, such as the Trans-Pecos and the High Plains, saw increases of 50 percent and 30 percent, respectively.

The rate of fragmentation is related to rising land prices and rising land prices are related to fragmentation, Wilkins said. For instance, when a 3,000-acre ranch is divided into 300-acre holdings, the price per acre increases, as does the pool of potential buyers. If those 300-acre holdings are sub-divided into 50-acre ranchettes, the price increases again as does the potential buyer pool.

"The period covered by this study includes a time when rural land values were rapidly increasing," Wilkins said. "With the current economic downturn, it might tempt some to say that the economy will slow down fragmentation. While rural land prices are not appreciating as quickly as they once were and land is staying on the market for a longer period of time, land prices have not taken a drastic fall (at the date of this writing), so it is shortsighted to base the state's future on the hope that people will stop buying and

selling land."

Derry Gardner, owner of Gardner Appraisal Group Inc. and TWA past president, said, "Land is a tangible asset that has historically outperformed the stock market, so people with financial resources consider it a good investment. In troubled economic times, savvy investors carefully watch land prices and purchase property to diversify their financial portfolios. People will continue to buy and sell land."

Gardner, proving that every issue involving land use, has many sides, continued, "Unfortunately, decreasing profitability from traditional agriculture is a fact of modern life. Fortunately, though for those producers who choose to sell their land—in part or totally—the values have appreciated, affording them, in many cases, opportunities for financial security. When these landowners divest themselves of their large holdings, it gives other people an opportunity to own their own, albeit smaller, pieces of our great state." These new landowners are anxious to become good land stewards themselves and are eager for any education that organiza-

tions like TWA and AgriLife Extension can provide, he said.

Just as profitability is a key indicator of land-use stability and a key element to keeping open-space land in production, it can also be the catalyst for ground-breaking public policy to effectively address the issue of land fragmentation without resorting to regulation.

"If we can come up with solutions to help keep large ownerships profitable, then we can effectively keep land in productive open space," Wilkins said. "We need to avoid the knee jerk reaction of enacting new governmental regulations. Often as not, the unintended consequence of regulation is that it penalizes people for their land stewardship efforts and stifles those innovations that may provide some creative solutions."

Setting Value to Open-Space Land

One unexplored way to increase profitability is assessing an economic value for the "products" of open-space land.

"Instead of regulation, what we really need are policies that reward land stewards for producing things, such as clean water, that aren't loaded up and taken to



Because most Texans don't understand the value of open land, many still view it as the home of future development.

the sale barn," Wilkins said.

Traditionally, the only public support for private land stewardship comes in the form of conservation programs such as the Wetlands Reserve Program, the Grassland Reserve Program and similar initiatives, said Blair Fitzsimons, Texas consultant to American Farmland Trust who also serves as executive director of the Texas Agricultural Land Trust. Perhaps, the time is right to increase the incentives.

"Ag lands provide a wide array of public benefits and, yet, the general public often views open-space land as 'the home of future development'," Fitzsimons said. "Because people don't clearly understand the role that land plays in our environmental well-being, society values the land solely on its potential productivity. It's time to challenge the idea that development is always the highest and best use of land."

Agriculturists understand that land serves many purposes, she said. It is the productive resource responsible for food, fiber and forestry products, sustaining human life, while driving a vital segment of the state's economy. It provides habitat

for wildlife. It is a key component of ecological processes necessary for clean water, sufficient oxygen, carbon sequestration and nutrient cycling.

"To affect policy, land stewards must not only articulate the values of their efforts, but they must be able to quantify the impacts of their efforts," Fitzsimons said. "If profitability is a keystone to keeping open-space land productive, then we must explore every avenue that allows people to stay on the land and develop incentives that make it economically feasible."

Two Case Studies—Trinity River and Edwards Plateau

The study takes the first step toward quantifying the impacts of private land stewardship on water quality and quantity by adding two cases studies. One is set in the Trinity River Basin, while the other in the Edwards Plateau. The locations of the case studies were chosen because land management in these particular areas directly impacts the water supply in three major cities.

The Trinity River is the primary source of water for both Dallas and Houston. The 350-mile stretch of wet-

lands, marshes and rangeland between the two urban areas filters waste products, which originate in Dallas, before the water arrives in Houston.

"If the wetlands systems on private lands along the Trinity no longer func-

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tion as a natural filter, either Dallas or Houston would be out of luck," Wilkins said. "Imagine what would happen to the economy, to people's lives and to the environment, if that clean water disappears." In fact, we may have to restore some of the Trinity River Basin's

Texas Agricultural Land Trust

The findings of the initial study, *Texas Rural Lands: Trends and Implications for the 21st Century*, identified land fragmentation as the single greatest threat to the sustainability of natural resources in Texas and has been credited with prompting the Texas Legislature to create the Texas Farm and Ranch Lands Conservation Program in 2005 as a means of keeping agricultural land in production.

The program, similar to those in 21 other states, compensates landowners for keeping their land in open space, through the purchase of development rights, which are negotiated to allow families to continue their farming, ranching and wildlife operations.

In order for the Texas Farm and Ranch Lands Conservation Program to be successful, private landowners needed to be confident that the land trust holding their conservation easement understood the production agriculture industry, including wildlife management. To meet that need, the Texas Agricultural Land Trust (TALT) was created with the input and leadership from many TWA members, including Steve Lewis, who currently serves as TALT president; Will Harte, Ryland Howard, David K. Langford, Bob McCan, and Dr. Don Steinbach. Blair Calvert Fitzsimons serves as TALT's executive director.

Fitzsimons said, "Our property tax code allows for special valuations for production agriculture and wildlife ac-

tivities. TALT is about keeping that strong. It's about fortifying our productive lands, but it's also about keeping rural lands rural. This is about having an alternative to condemnation and eminent domain powers, because when these methods are used, the property is usually taken off the tax rolls."

Although Texas is home to almost 50 land trusts, TALT is the only one that defines its mission as: "to help Texans conserve their agricultural lands, wildlife habitats, and/or natural resources, and to enhance and sustain the long-term stewardship of private lands for the benefit of all Texans." It is also directed by people who are agricultural producers or affiliated with organizations that represent the interests of producers.

The governing principles of TALT further distinguish it from other land trusts. TALT's governing principles include:

- Accept conservation easements on properties that contribute significantly to agricultural lands, wildlife habitats, and/or natural resources;
- Use mechanisms that do not adversely impact day-to-day management decisions;
- Avoid efforts that result in net increase in public lands or employ any type of condemnation action;
- Refuse to acquire conservation easements with the intent to transfer to the government;
- Respect landowners' rights re-

garding public access decisions, and

- Except to accommodate a grantor, avoid fee title ownership.

TALT President Steve Lewis said, "I realize that land trusts and conservation easements aren't for everyone. In fact, I was once opposed to them myself. Then I painfully watched the Texas Hill Country become fragmented with alarming speed before my eyes and began to wonder: Why am I opposed to the idea of private property owners voluntarily placing conservation easements on their ranches to ensure future open space and the production agriculture and wildlife habitat that goes with open space?"

He continued, "Today, I am an advocate for conservation easements. I volunteer my time to serve as TALT President, because it is satisfying work for me.

"Conservation easements offer a power tool for those visionary stewards who, after careful consideration and research, want to ensure that the land in their care stays open and productive forever. I support those landowners who value the rural heritage represented by Texas' open landscape more highly than they value personal gain. It is satisfying to help those visionary stewards leave their very personal stamps on the future."

For more information about TALT, see the organization's website at: <http://www.txaglandtrust.org/>.

native bottomland hardwoods and emergent wetlands in order to provide clean water for the future. This habitat restoration is the focus of a Trinity River Initiative.

The Texas Wildlife Association Foundation has been instrumental in the Trinity River Initiative, providing both expertise and funding, to the effort that involves both education and research. The initiative is designed to help ensure that private land stewards can continue to contribute to the health and well-being of the river's ecosystem.

The rangelands of the Edwards Plateau lie directly over the Edwards Aquifer. Research, some of which has been funded by the Texas Wildlife Association Foundation, has shown that the condition of the rangeland directly affects the rate of aquifer

recharge, which is the primary source of water for San Antonio and the region.

"If the native rangelands of the Edwards Plateau are converted to another land use, think what that would mean for San Antonio," Wilkins said. "Many landowners, the real land stewards, are in the lead on this issue, as most of the general public doesn't yet see the connection between well-managed private lands and their lives."

Although land fragmentation appears to be an abstract concept, it has very personal consequences for landowners and Texas residents. Currently, the group is developing policy recommendations based on the trends identified in the study and creating a website that allows policy

makers and the public to access and analyze the data on a local, regional and statewide basis.

American Farmland Trust's Fitzsimons said, "In Texas, our land has long defined us. We need people to understand that it also sustains us. Without productive agricultural land, our economic and environmental future will be bleak. Policy makers must understand that land stewards, literally, hold the state's future in their hands."

For more information on the study or to access the database, please go to: www.txlandtrends.org. The policy recommendations, when they are finalized, can be found at: <http://www.farmland.org/programs/states/tx/default.asp>. 🐾

More on Page 24



What's the value to society of an oxbow along a riparian area? In addition to providing habitat for fish and waterfowl, such areas slow down water flow, reducing downstream flooding, often in urban areas.

Tax Incentive for Conservation Easements

One of the tools that landowners can use to help keep their agricultural lands intact is a conservation easement, a binding agreement that allows private landowners to permanently retire development rights on their property.

In addition to protecting open-space land from inappropriate development, conservation easements can provide landowners with tax benefits. These incentives, as part of the 2008 Farm Bill, have been extended through 2009. The renewed incentive:

- Raises the maximum deduction a donor can take for donating a conservation easement from 30 percent of their adjusted gross income in any year to 50 percent;
- Allows qualified farmers and ranchers to deduct up to 100 percent of adjusted gross income,
- And increases the number of years over which a donor can take deductions up to 16 years.

Without Congressional action, the incentives will expire at the end of 2009. TWA, as part of a consortium of natural resource and agricultural organizations, is working to make these incentives permanent.

"TWA understands that conservation easements are not for every person, because conservation easements are not the answer for every family," said Gary Joiner, TWA Chief Executive Officer. "We want conservation easements to benefit those families who choose to use them as a way to keep their land open and productive. To combat land fragmentation, landowners in Texas need every tool available at their disposal. TWA supports making the tax incentives permanent."