





## Land Fragmentation

Breaking up of land into smaller or separate pieces

# FRAGMENTATION AND EDGE EFFECT

An aerial photograph showing a large, dark green forested area in the center, which is fragmented by several winding roads and residential developments. The residential areas consist of rows of houses with light-colored roofs and walls, interspersed with green lawns and some small ponds. The forest area is irregular in shape, with several inlets and protrusions where roads and houses encroach upon it. The overall scene illustrates the concept of habitat fragmentation and the edge effect.

- Increased edge effect
- Increasing generalists
- Increased parasitism
- Increased predation
- Specialists lost
- Ecological trap



## May benefit

- White-tailed deer
- Some game birds
- Small mammals
- Small/medium predators
- Invader Species

## May harm

- Interior forest species
- Grassland species
- Habitat specialists
- Threatened or endangered species

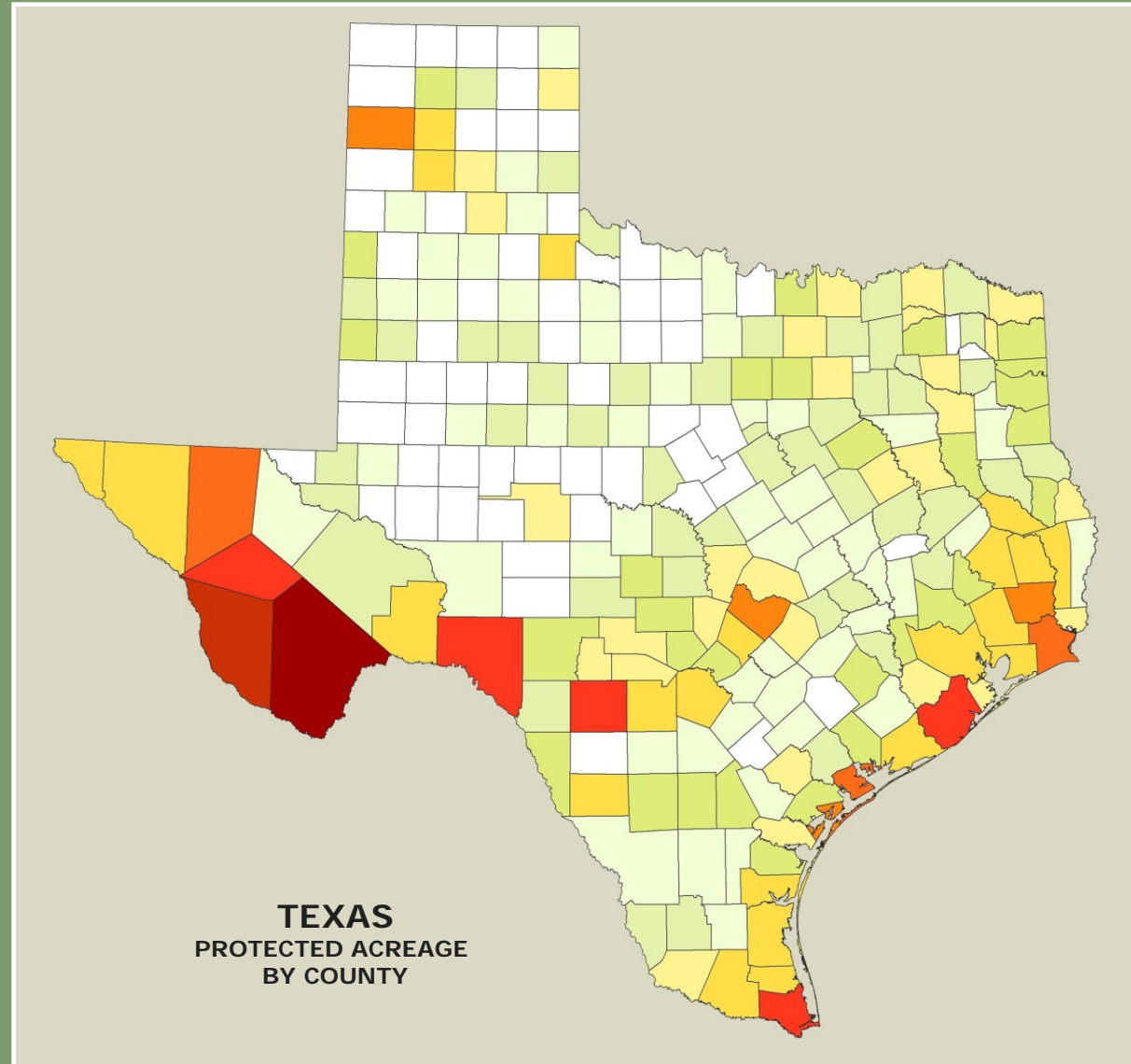


## Land Protection Overview 2017 –Texas Chapter

Conservation land in Texas  
totals over 4 million acres

Just 2.4 percent of state

Not geographically  
balanced; more than half  
of acreage located in ten  
counties (Brewster,  
Presidio, Val Verde, Jeff  
Davis, Cameron, Brazoria,  
Uvalde, Jefferson, Calhoun,  
Culberson)



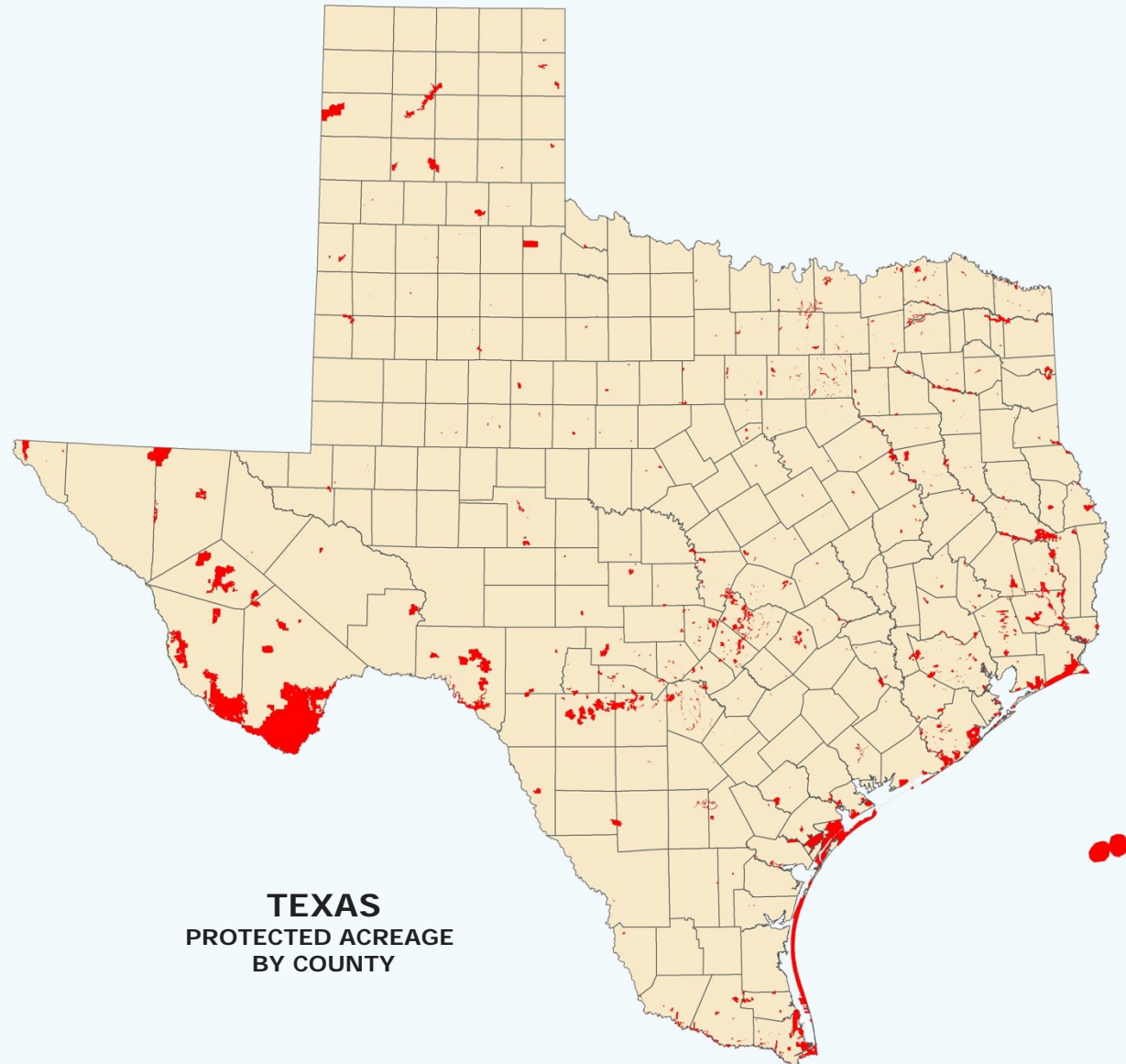
## Land Protection Overview 2017 –Texas Chapter



Conservation land in Texas  
does not fully protect the  
state's biodiversity

Most parks and preserves far  
from the state's population

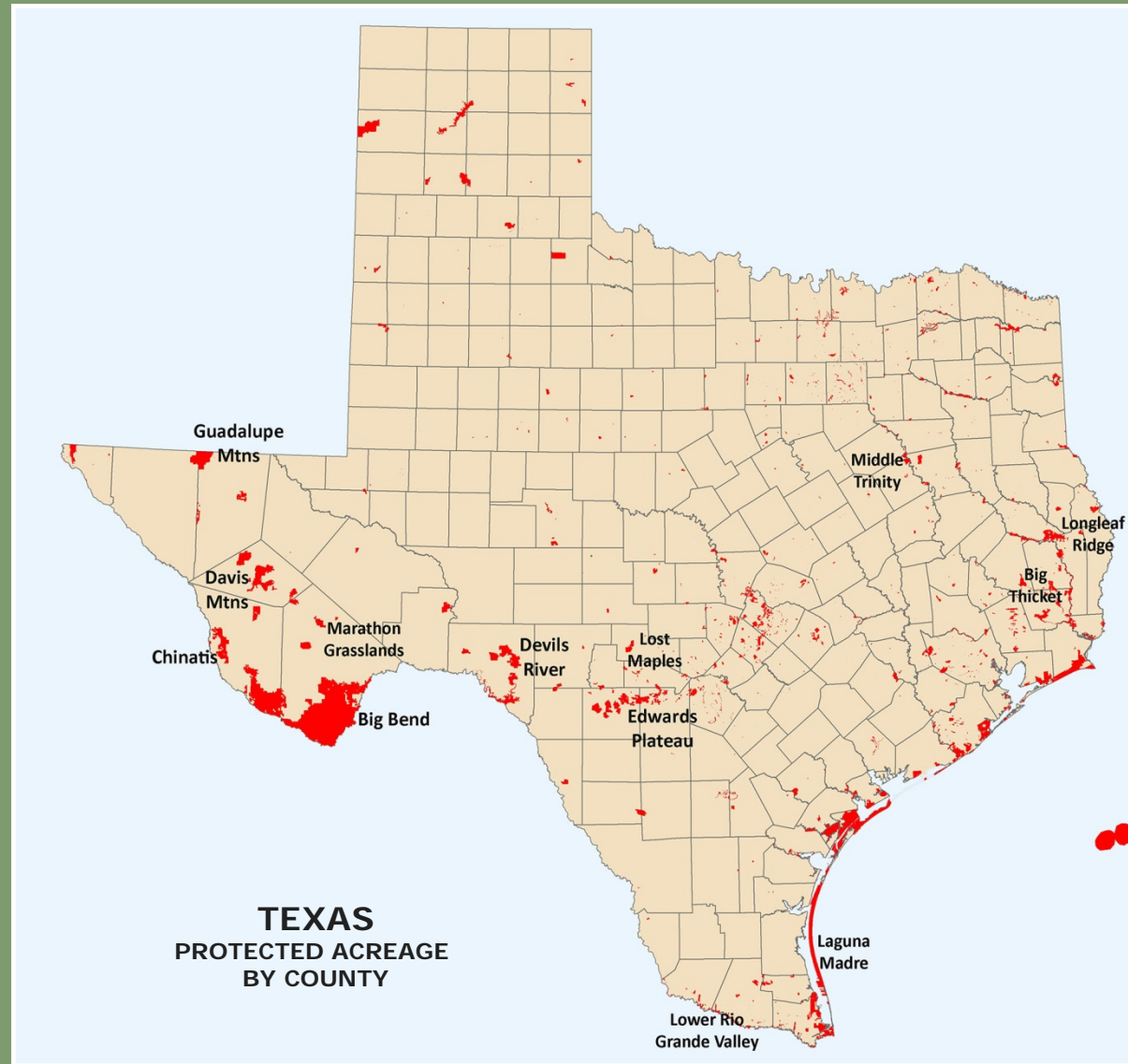
Most conservation lands in  
Texas are limited in size





## HIGHEST NUMBER OF CONSERVATION TARGETS

1. Edwards Plateau Karst (~190)
2. Big Bend/Rio Grande (90)
3. Lower Rio Grande Valley (50)
4. Davis Mountains (43)
5. Guadalupe Mtns/Salt Basin (41)
6. Laguna Madre/Sand Sheet (41)
7. Longleaf Ridge (31)
8. Trinity/Carrizo Sands (26)
9. Sierra Vieja/Chinatis (24)
10. Big Thicket/Sandylands (22)
11. Devils River (22)
12. Lost Maples/Love Creek (19)
13. Marathon Grasslands (17)





<u>Organization</u>	<u>Acres</u>
National Park Service	1,227,088
Texas Parks and Wildlife Dept.	1,048,045
US Forest Service	675,000
US Fish and Wildlife Service	429,092
Local Government	127,218
The Nature Conservancy	100,065
Texas Forest Service	<u>13,638</u>
TOTAL	3,620,146

## Land Protection Overview 2017 –Texas Chapter



<u>Organization</u>	<u>Acres</u>
The Nature Conservancy	378,042
Texas Agric. Land Trust	224,900
City of San Antonio	133,447
Texas Land Conservancy	85,000
US Dept. of Agric.	69,502
US Fish and Wildlife	47,960
Other Land Trusts	<u>108,922</u>
TOTAL	1,047,773



## Why Conservation Easements

- Cost Effective
- Public Benefits
- Income/Estate/Property Tax Savings