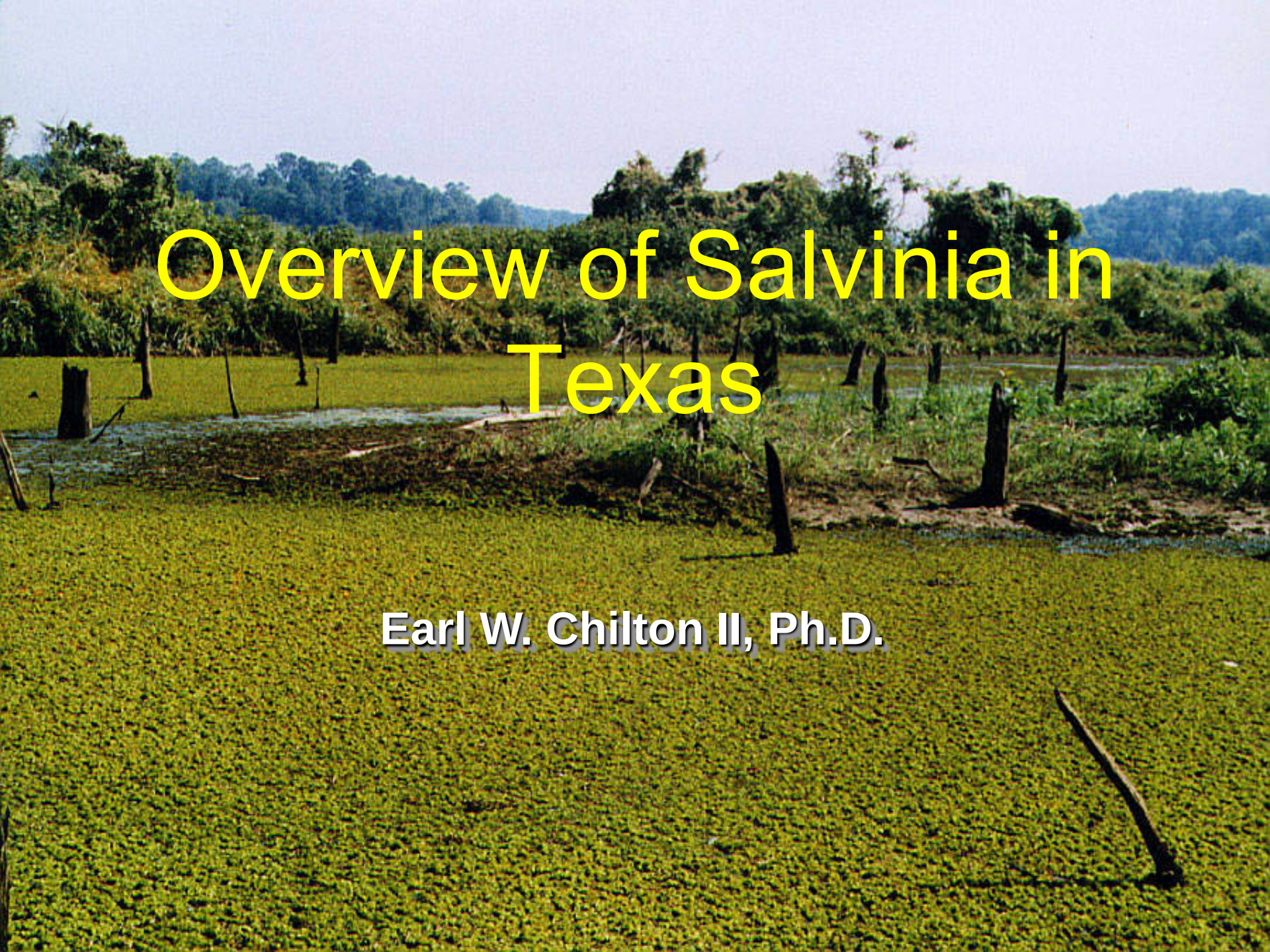


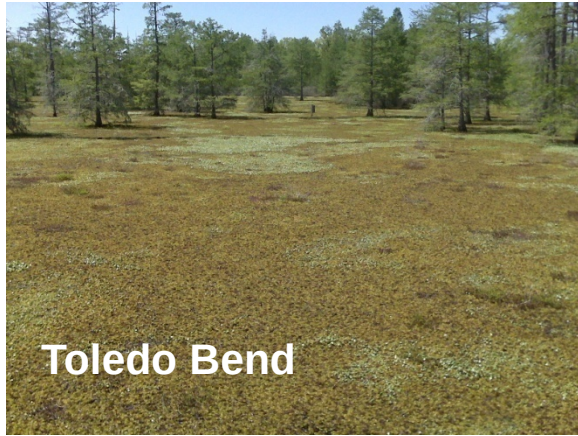


Overview of Salvinia in Texas

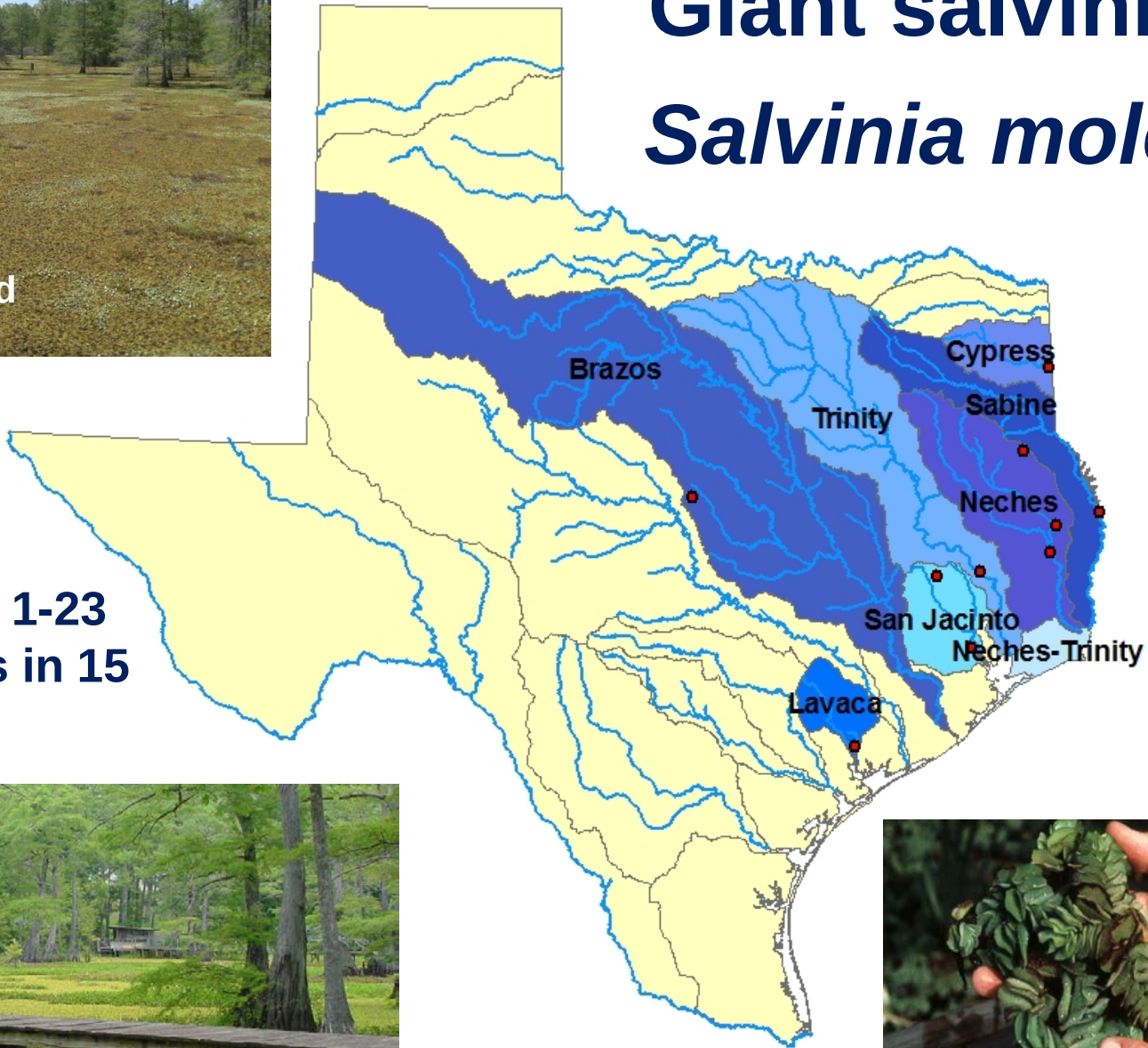
Earl W. Chilton II, Ph.D.

Giant salvinia

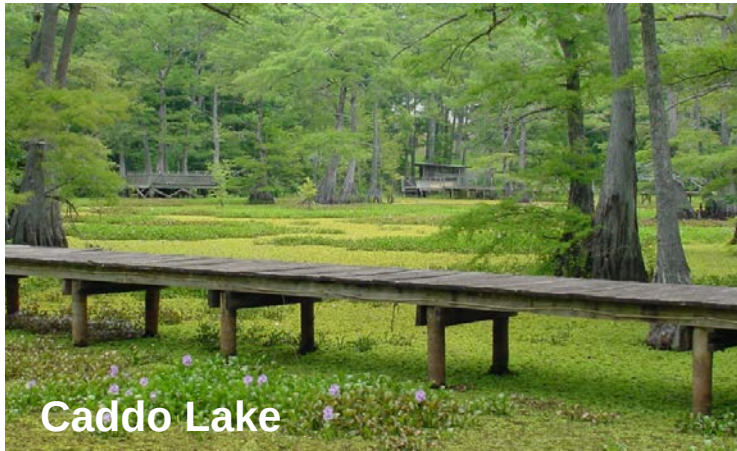
Salvinia molesta



Toledo Bend



Spread from 1-23
water bodies in 15
years



Caddo Lake

6,000-18,000 acres



Mature giant
salvinia

Giant Salvinia Growth

Lake Kariba, Africa – Giant salvinia expanded to cover 250,000 acres in three years



Giant Salvinia Growth



Sepik River (Papua, New Guinea) - Grew to cover 96 square miles in eight years (1972-1980)

Giant Salvinia Growth

Doubling time:

Greenhouse	2.2 days
Sterile culture lab	3.4 days
Lake Kariba	8.1 days

Optimum temperature **30 °C (86 °F)**

Temperature range **10°C (50 °F) –
40 °C (104 °F)**

Giant salvinia and Caddo Lake



Giant salvinia and Toledo Bend Reservoir

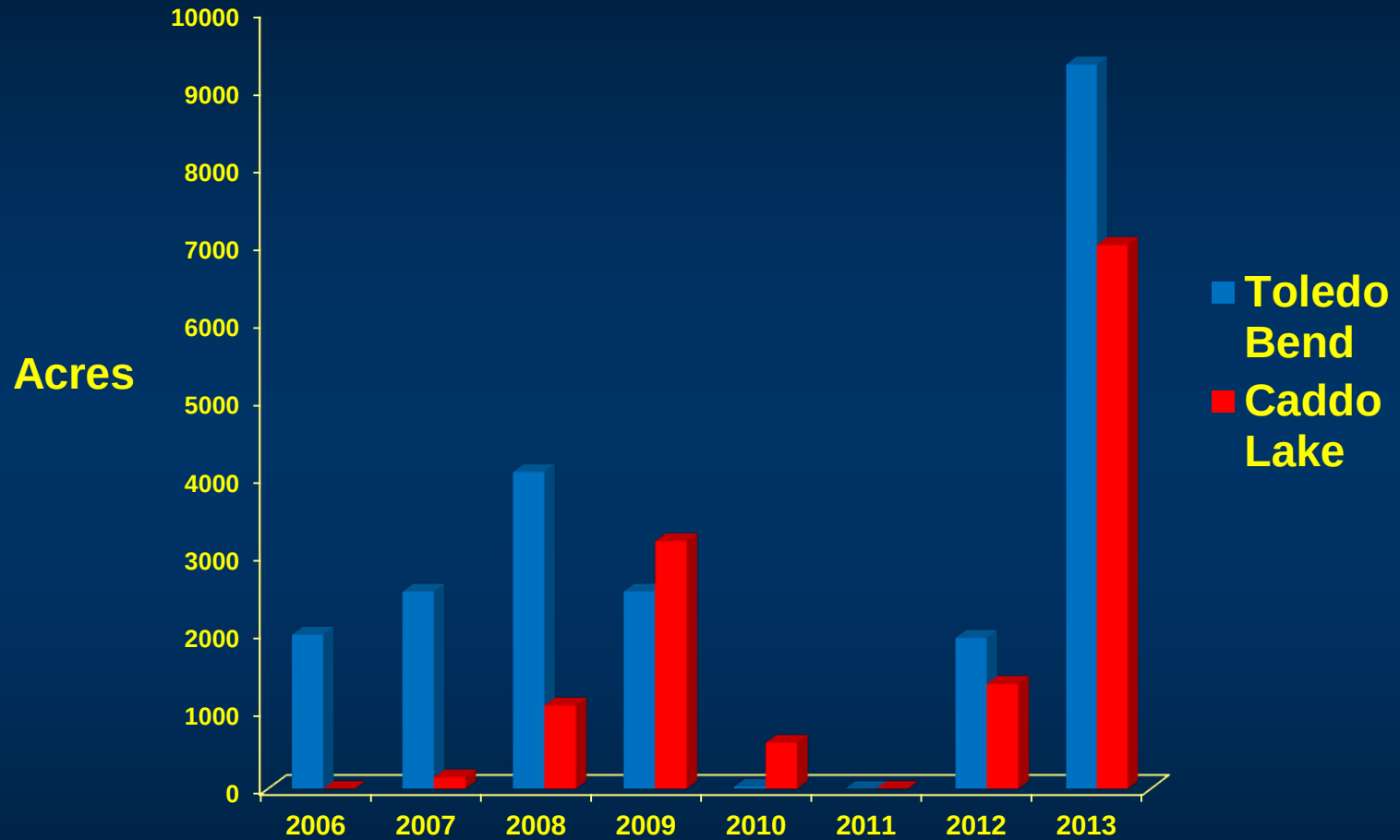












Lower Trinity River wetlands areas

Lake Charlotte



Lake Charlotte east of Houston



Management Options



Cyrtobagous salviniae
Richard Chan

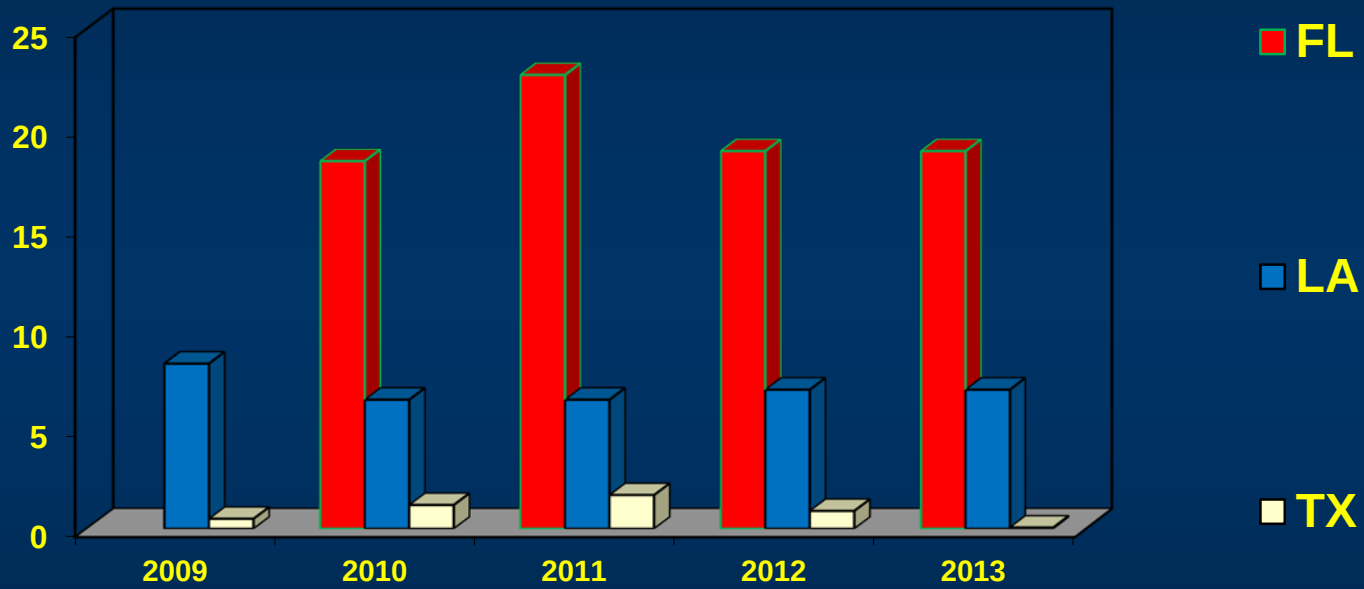
Biological Control	Giant salvinia weevil
Booms	Yes ¹
Herbicide	Bispyribac, Diquat, Flumioxazin Fluridone, Glyphosate Penoxsulam
Water level manipulation	Yes

Toledo Bend & Caddo Lake

- 2013 Estimated Combined Acreage of 13,000 to 15,000 acres of giant salvinia
- Herbicide Treatment Costs: about \$65 per acre



\$ Mil





Thank
You!

Montague, Collin, Cooke, Dallas, Denton, Fannin,
Grayson, Hood, Jack, Kaufman, Palo Pinto, Parker,
Rockwall, Stephens, Tarrant, Wise, Young

Archer, Bastrop, Bell, Bosque, Burnett, Clay, Comal,
Comanche, Coryell, Eastland, Ellis, Erath, Falls, Fayette,
Freestone, Hamilton, Hays, Henderson*, Hill, Johnson,
Leon, Limestone, Llano, McLennan, Navarro, Robertson,
Somervell, Travis, Wichita, Williamson

- Zebra mussels found (adults/veligers)
(Bridgeport, Ray Roberts, Lewisville, Texoma,
Lavon, Belton)
- Zebra mussel DNA detected (Arrowhead,
Eagle Mt., Worth, Grapevine, Joe Pool,
Ray Hubbard, Tawakoni, Fork, Bob Sandlin, Caddo)

