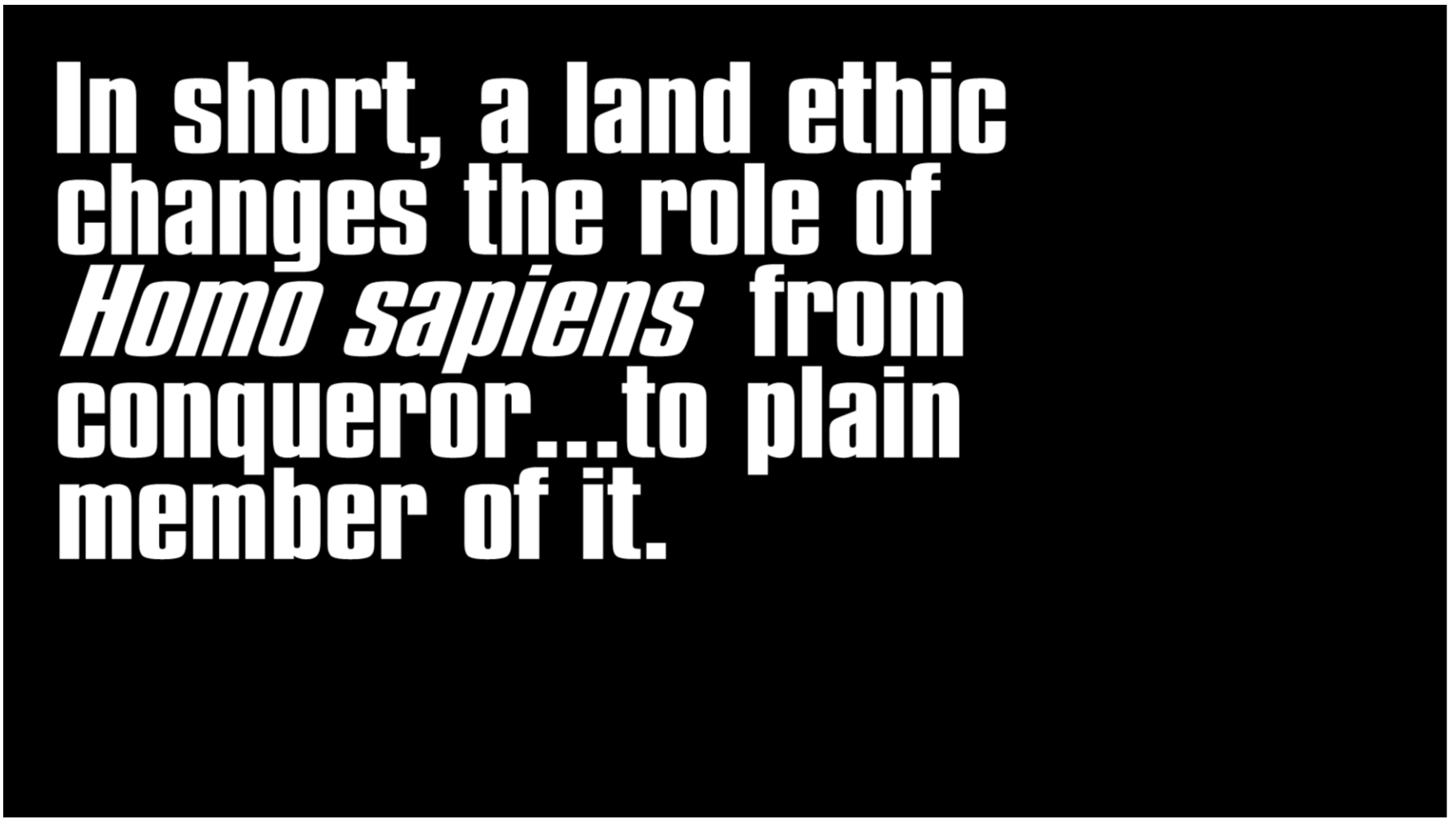
[Originally created by Game Warden Assistant Commander Michael Mitchell in Austin in January, 2016. Modified thereafter. He founded a chapter and is a strong supporter of the program.]

References are from the new Texas Master Naturalist curriculum.

Bring when speaking on this topic:

- Backup video projector & cords
- Easel and Markers
- Giveaways
- Laser pointer
- Giveaways/Outdoor Annuals/Pamphlets/Cards/Pins
- TMN Curriculum Chapters 1 & 22

- There are three main segments to this training session.
- It has two major sections
- The two parts are broken up by slides with logos



- [Have an audience member read the quote aloud to the class]
- Quote is from naturalist Aldo Leopold (1887-1948)
- This one quote sets the stage for the lecture

[Photo courtesy of Texas Parks & Wildlife Department]

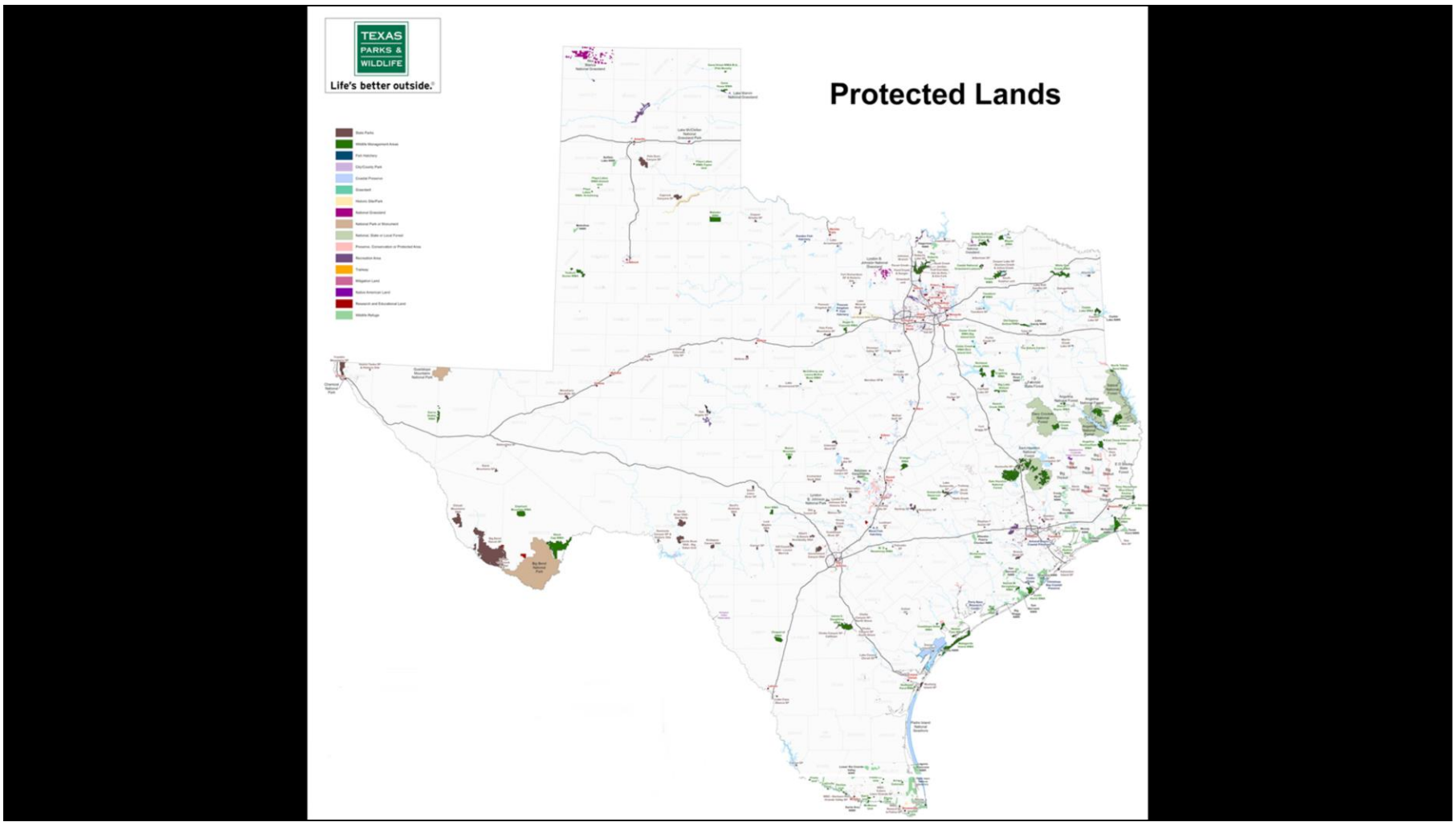
- The best definition of land stewardship is in the Texas Master Naturalist mission statement: “Beneficial management of natural resources and natural areas.”
- This concept goes back to Plato in 400 BC.
- See TMN Curriculum book Module 1: Land Stewardship, which sets the foundation for this lecture on Section 22

[Photo used under the Educational Fair Use provision]

- Having a puppy is like being a land use steward
- It is outrobligation to care for and nurture this item

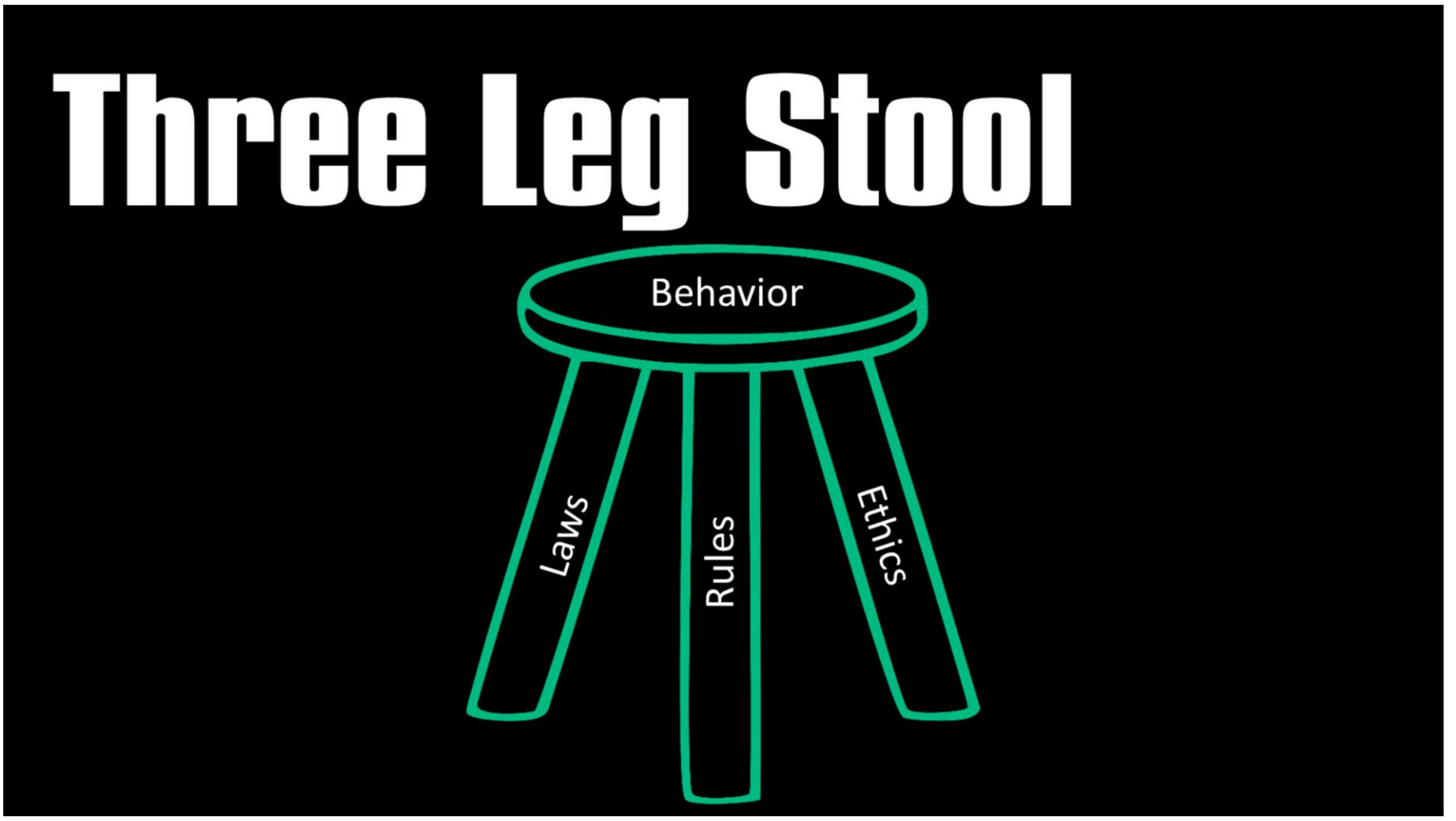
[Photo courtesy of Texas Parks & Wildlife Department]

- We know from Module 1 that 86% of Texans live in urban centers.
- We know that Texas' population increased by 10 million people from 1980 to 2014.
- Managing land is difficult, many landowners are absentee, and only around 5% of Texas land is public.

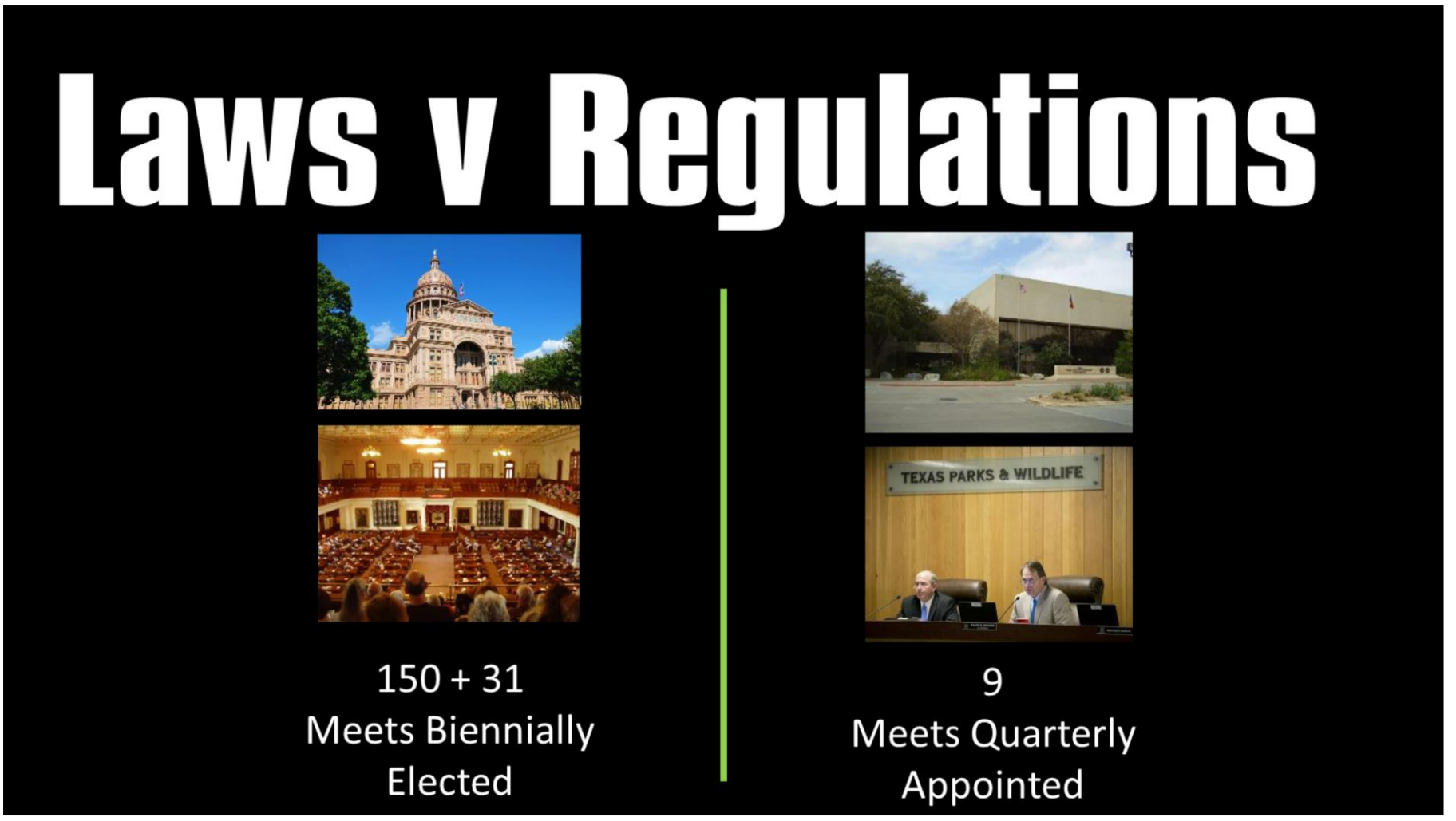


[Graphic courtesy Texas Parks & Wildlife Department]

- Texas land is 95% private, 5% public.
- Texas has 125 Public Hunting Lands, State Parks & Natural Areas = 600,000 acres
- 51 Wildlife Management Areas = 756,000 acres
- Federal land acreage: = 2.9 million acres

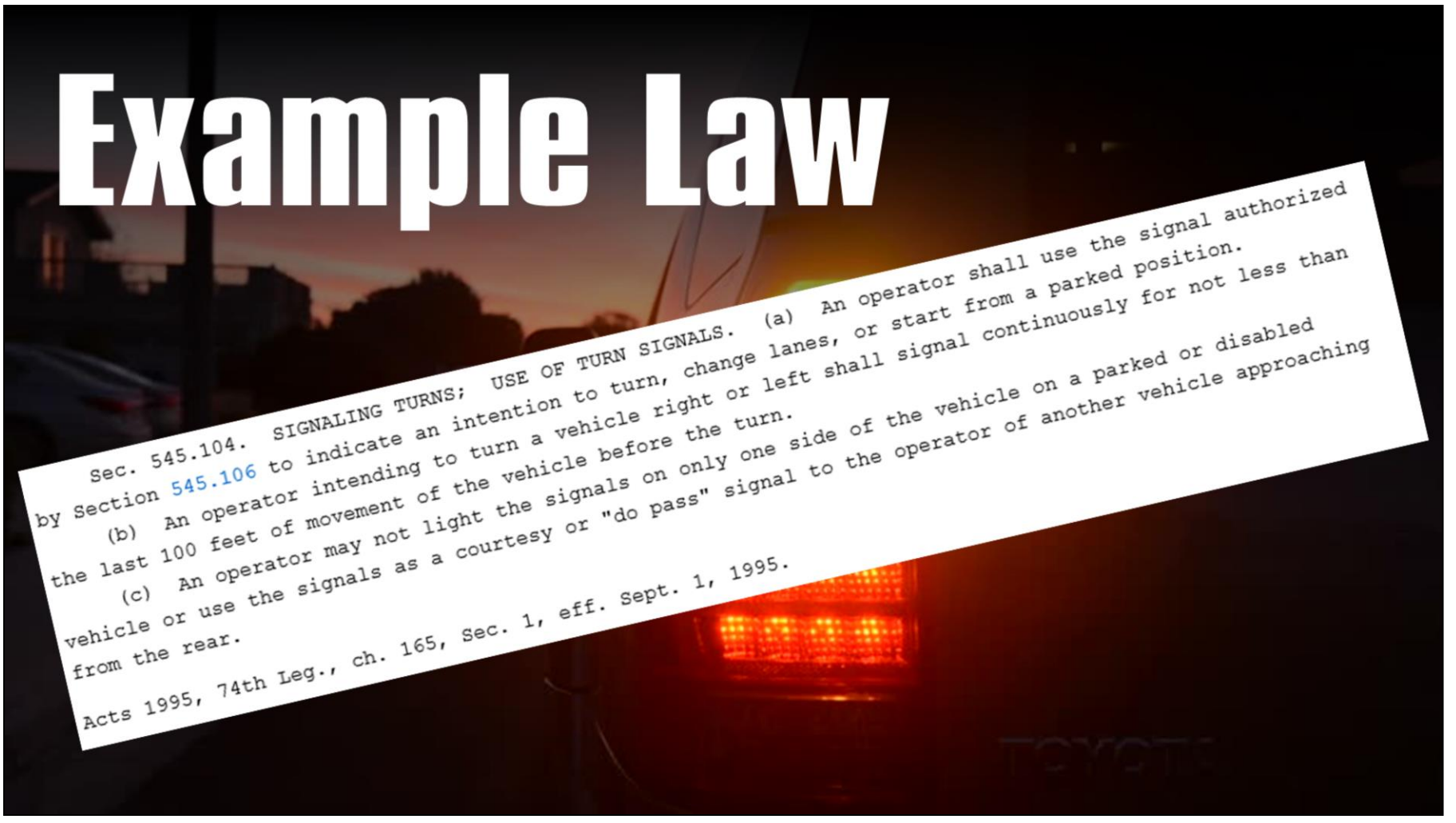


- Three legs support this idea.
- Combined they govern the ideal foundation for the Texas Master Naturalist



[Photo courtesy of Texas Parks & Wildlife Department]

- There are two distinct bodies. One makes laws and the other makes regulations.
- Regulations are published in the Texas Administrative Code.
- Regulations may also be enacted also by other bodies, such as the river authorities.



[Photo courtesy of Texas Parks & Wildlife Department]

- Example law is the Texas Transportation Code.
- Thou shalt turn on their blinker not less than 100 feet before the intersection.
- Example law set by the Texas Legislature.

[Photo courtesy of Texas Parks & Wildlife Department]

- Example regulation is a prohibition of hunting roosting turkeys…
- It is published in the Texas Administrative Code.
- The regulation was passed by the Texas Parks and Wildlife Commission.

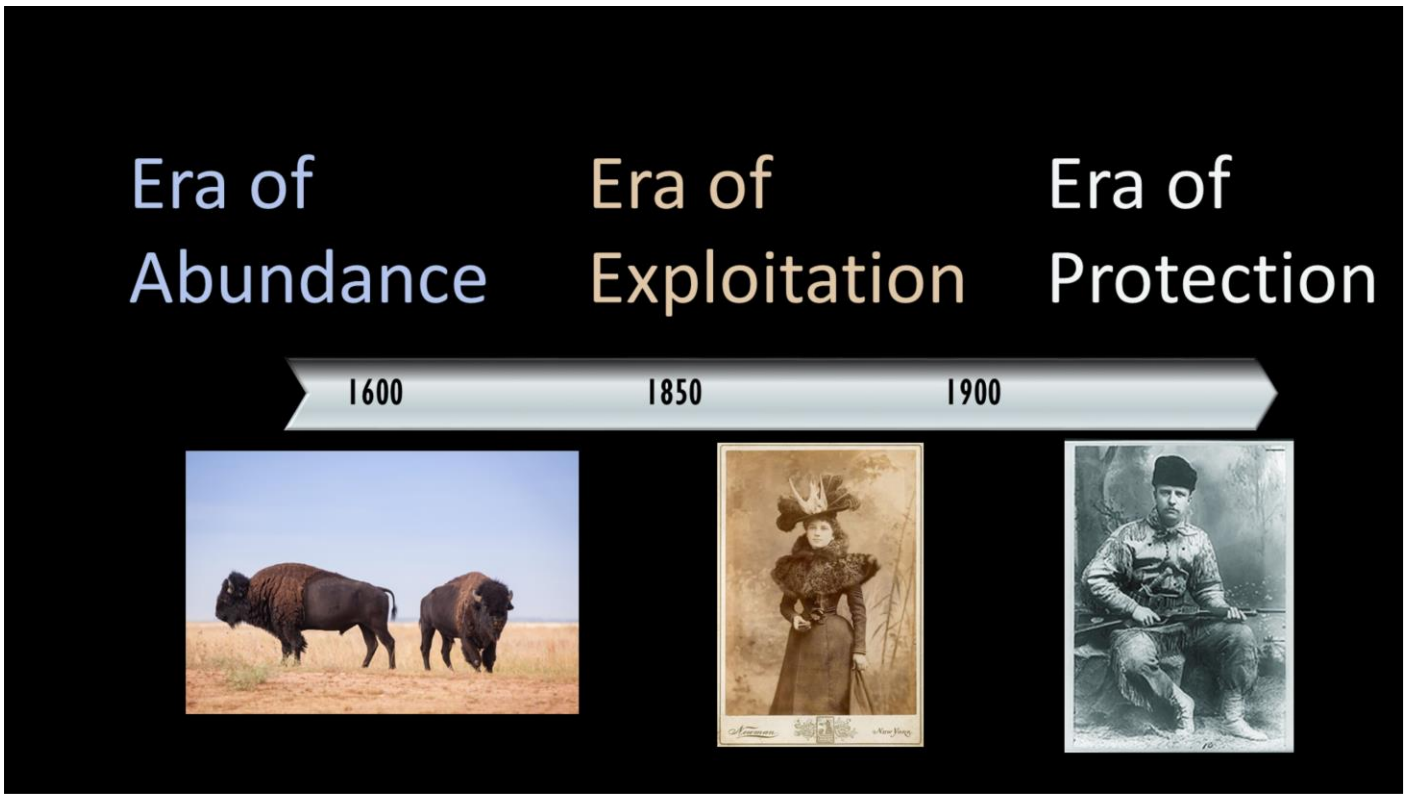
[Photo used under Educational Fair Use provision]

- Certainly this is only a dramatic example.
- An example is like being at a stop sign in the middle of nowhere.
- Do you still stop, if nobody is around?

[Photo courtesy of Texas Parks & Wildlife Department]

- Texas law clearly states that all wild animals, fur-bearing animals, wild birds, and wild fowl inside the border of the state are property of the people of the state.

[Photo courtesy of Texas Parks & Wildlife Department]



[Photos from Texas Parks & Wildlife Department, Hossier State Chronicles & Marine Bio Conservation Organization under Educational Fair Use Provision]

Era of Abundance

- Early American settlers faced an abundance of wildlife and had no regulations
- This drove down wildlife populations resulting in regulations to be established
- In 1630, money was paid for wolf hides to aid in predator control

Era of Exploitation

- North American continent transformed from a land mass with vast areas to one with cities and farms scattered everywhere and held together by a spidery network of railroads, roads, and telegraph wires
- Sudden settlement of the West Coast (catalyzed by the discovery of gold in California), the Civil War, the disappearance of eastern forests, an enormous influx of immigrants from Europe, Asia, and Africa, and the vast expansion of industry and technology.
- Increase in human population, combined with the technology of the early industrial era and the demands of a market economy, caused wildlife populations to plummet from a combination of unchecked exploitation and environmental alteration.
- The vast migratory herds of bison on the Great Plains were systematically slaughtered or died of cattle-borne diseases until only a few hundred individuals were left.
- The passenger pigeon, whose numbers were once reckoned to be in the billions, became extinct in the wild. Both adults and young were harvested commercially. The last bird died in captivity in 1914.
- Heron and egret populations were decimated by hunters shooting them in their breeding colonies for plumes for ladies hats.
- The ranges of large predators such as grizzly bears, mountain lions, and wolves became greatly reduced. Mountain lions and wolves were virtually eliminated from eastern North America, as were grizzly bears from California.
- White-tailed deer became extremely scarce in the eastern United States through a combination of habitat loss and over-hunting
- Runs of salmon and shad disappeared from many eastern rivers, their runs blocked by mill dams or killed by factory wastes in combination with unlimited fishing.
- Nature was regarded as something that got in the way of civilization and "progress", and a source of goods to sell on the market.
- The agrarian mindset of the time was often frightened by the abundant wild animals and uncontrolled wild ecosystems, and thus thought nature had to be tamed and controlled.

Era of Protection

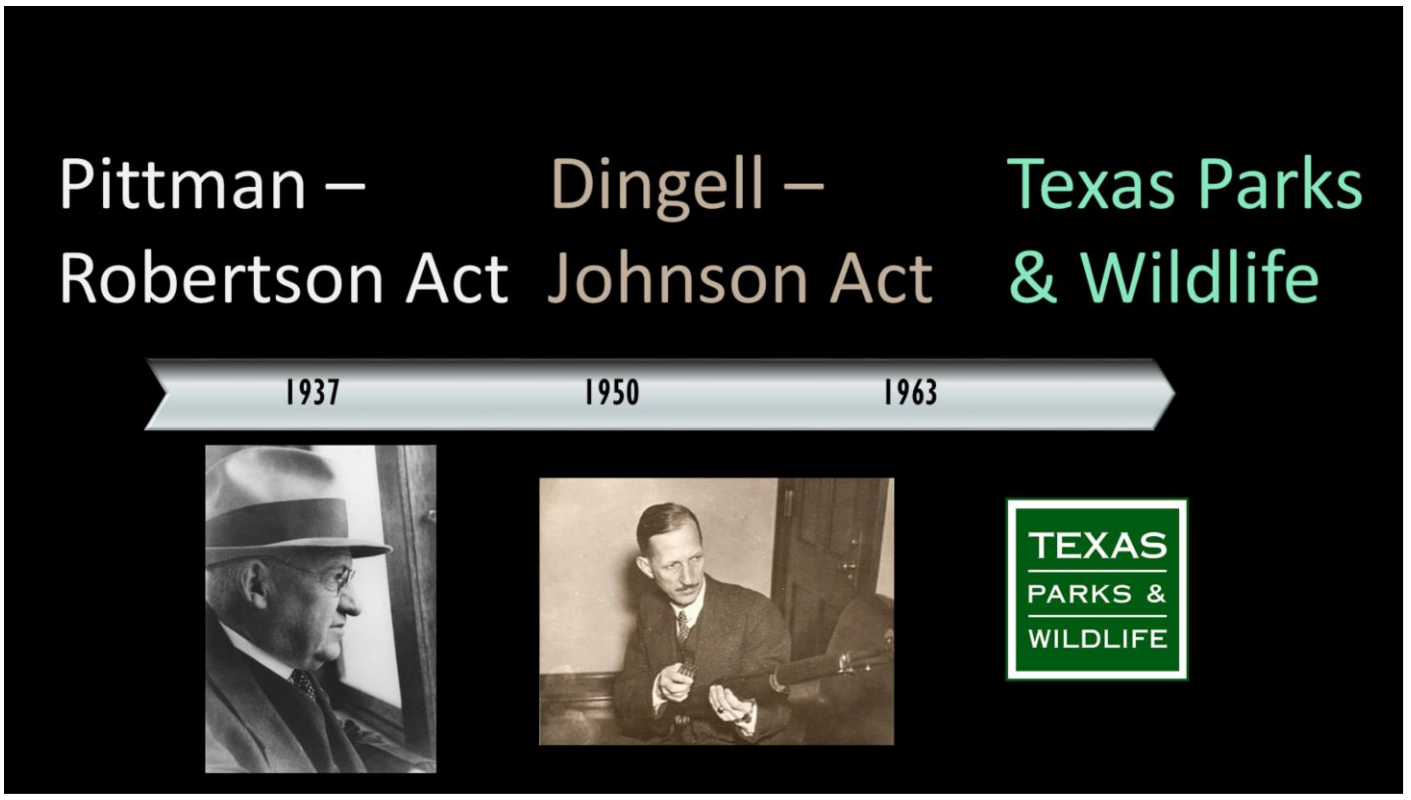
- Americans began to notice what was happening to some of the wildlife throughout the country
- 1900 - Lacey Act was passed. The Lacey Act prohibited inter-state commerce; protecting animals by forbidding their movement across state lines
- 1901 - Theodore Roosevelt was elected as president and began making strides for wildlife conservation. He tripled the size of protected forests and created the U.S. Forest Service. He also created the first national wildlife refuge and passed many laws that made the hunting of migratory birds (except waterfowl) illegal
- 1918 - Migratory Bird Treaty Act

[Photo courtesy of Texas Parks & Wildlife; US Fish and Wildlife Service]

1907-Texas Game, Fish and Oyster Commission was established.
1909-First hunting licenses required of those who hunted outside of their home or an adjoining county. 5000 were sold this first year.

Era of Habitat and Harvest

- This era brought a more scientific approach to the conservation of wildlife and fish populations that were diminishing.
- This was influenced by the increasing demand for recreational hunting and fishing.



[Photos courtesy of Nebraska Game and Parks]

- 1937 Pittman – Robertson Act (created an excise tax that provides funds to each state to manage such animals and their habitats. Notable species that have come back from the brink since the implementation of this act include white-tailed deer, wild turkey, and wood ducks)
- 1950 Dingell – Johnson Act (state fish restoration and management plans and projects)
- 1963 TPWD renamed

- BONUS: Sand County almanac came out in 1948

{Photos courtesy of Texas Parks & Wildlife Department]

Era of Management

The public began to insist on environmental protection. Soon the politicians followed.

1970 - Environmental Protection Agency (EPA) was established.
1970 - Clean Air Act was passed to regulate emissions.
1972 - First Earth Day
1973 – Endangered Species Act passed
1977 - Clean Water Act was passed to regulate the discharge of pollutants into U.S. waterways.
1981 - House Bill 1000 prohibits commercial sale of redfish & trout
1981 - Operation Game Thief established. Received 2,200+ calls

[Photos courtesy of Texas Parks & Wildlife]

- 1984 Wallop – Breaux (Aquatic Resources Trust Fund; provided for additional funds captured from a portion of the federal gasoline excise taxes attributable to motorboats by a formula based upon boat registrations)
- 2016 Blue Ribbon Committee meets and seeks federal oil & mineral rights revenues to be distributed to the states

[Photo courtesy of Texas Parks & Wildlife Department]

- Quick look at Texas Game Wardens in this historical context.

[Photo courtesy of Texas Parks & Wildlife Department]

- Game Warden Herbert Ward in 1924 in East Texas.

[Photo courtesy of Texas Parks & Wildlife Department]

- Game Wardens check hunter at the roadside.

[Photo courtesy of Texas Parks & Wildlife Department]

Game Warden in vehicle in 1940s.

[Photo courtesy of Texas Parks & Wildlife Department]

- Recent graduating cadet class, at the state capitol right after graduating.
- Classes roughly occur once per year, dependent upon funding.
- The training program is 7 months long in a live-in academy near Hamilton, Texas.

[Photo courtesy of Texas Parks & Wildlife Department]

- This is an example of one of our special teams, the STORM team. It specializes in accident reconstruction, including boat and hunting accident.
- Numerous other specialized teams exist
- These include dive team, K9, SCOUT, marine theft investigation, and honor guard

[Photo courtesy of Texas Parks & Wildlife Department]

- Game Wardens operate as the Texas Navy.
- They have abut 380 boats
- They range from kayaks to 65’ offshore vessels

[Photo courtesy of Texas Parks & Wildlife Department]

- Extension of previous concept.

[Photo courtesy of Texas Parks & Wildlife Department]

- Extension of previous concept.

[Photo courtesy of Texas Parks & Wildlife Department]

- Game Wardens roles have changed over the years
- During Hurricane Harvey:

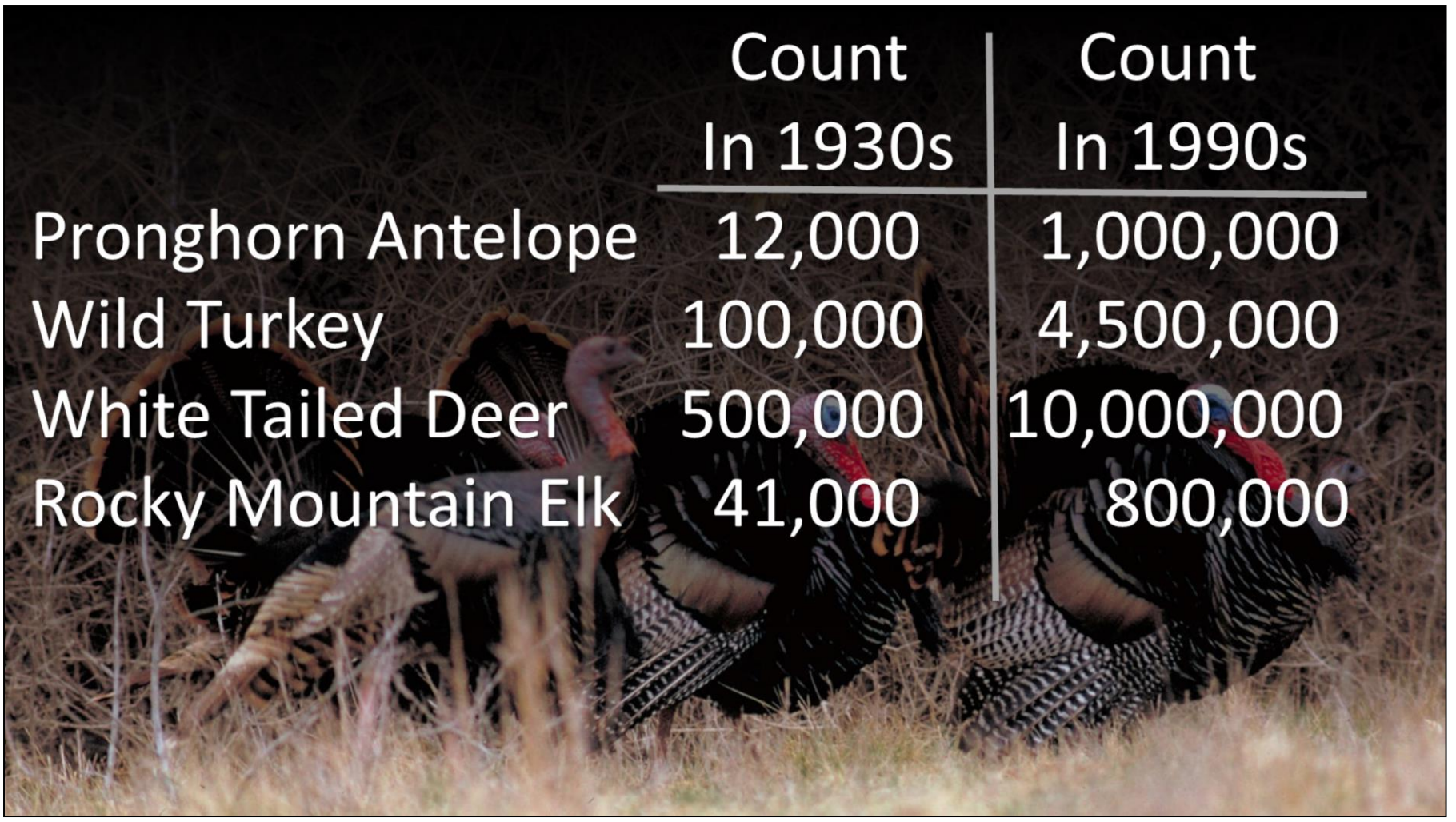
Texas Game Wardens / Trucks / Boats: 278/278/115
Park Police Officers / Trucks / Boats: 90/90/25
Out of state Game Wardens
(FL, LA, AR, SC, OK, KS, PA, IN, ME)/Trucks/Boats: 280/140/130
Helicopter hoist rescues: 114
Boat/Water rescues: 11,212 (This includes TPWD Game Wardens, State Park Police Officers and out of state Game Wardens)

[Photo courtesy of Texas Parks & Wildlife Department]

- Eighteen Game Wardens have lost their lives defending that which has no voice.
- They are memorialized in many ways, including at our Game Warden Memorial in Athens

[Photo courtesy of Texas Parks & Wildlife Department]

- Early 1900s – No conservation funding
- Federal Excise Tax Mechanisms
- Endangered Species Act – 1973
- State Wildlife Grants – 2000
- Blue Ribbon Committee – 2016



[Photo courtesy of Texas Parks & Wildlife Department]

[Photo courtesy of Texas Parks & Wildlife Department]

- See the numerous example situations that are given in the text.
- There are several listed there.
- Every situation is different.
- Persons around you will be looking to Master Naturalists as the example setters.

[Photo used under Educational Fair Use provision].

- Bird nest has fallen and a young person picks it up.
- Is this legal?
- Is it ethical?

Migratory Bird Treaty Act

Unless and except as permitted by regulations made as hereinafter provided in this subchapter,

it shall be unlawful at any time, by any means or in any manner, to

pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export,

any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof

{Text courtesy of the US Fish & Wildlife Service]

- 16 US Code 703 is the Migratory Bird Treaty Act of 1918
- Its provisions are strong
- Its principles are stronger

[Photo courtesy of Texas Parks & Wildlife Department]

- Permits are required and available.
- They include scientific and other permits.
- The state issues state-specific permits; the federal government migratory specific permits.

[Graphic courtesy of Texas Parks & Wildlife Department]

- Example Wildlife Diversity Permits web page from Texas Parks & Wildlife
- Permit seekers may fall under a parent organization, such as an area nature center
- Contact TPWD via email, telephone, or view the website

[Photo used under Educational Fair Use provision].

- Feathers of protected species are not legal to possess
- This is due to the MBTA
- Permits could grant an exception

[Photo used under Educational Fair Use provision].

- Climbing a fence and trespassing is not ok
- Asking permission could make it a terrific experience
- Many landowners would join your group is approached properly

[Map courtesy of the University of North Texas]

- Martin, Joseph. Milam County, map, June 12, 1868; (texashistory.unt.edu/ark:/67531/metapth88840/: accessed December 27, 2017), University of North Texas Libraries, The Portal to Texas History, texashistory.unt.edu; crediting Texas General Land Office.

[Photo courtesy of Texas Parks & Wildlife Department]

- Presuming there is no trespassing, this is legal

[Photo courtesy of Texas Parks & Wildlife Department]

- How Game Wardens and other TPWD employees interact with a chapter is a mutual decision between you and them.
- Contact them and they'll be glad to make your acquaintance!
- Use Find a Warden at www.tpwd.texas.gov/warden

[Photo courtesy of Texas Parks & Wildlife Department]

- So we carry forward an ethical standard.
- Not just one governed by external regulations, but that of our own internal mechanisms.
- Remember that character and integrity are not what you do when people are watching, but when they are *not* watching.

There were three main segments to this training session.
This is a natural break point.

[Photos used under Educational Fair Use provision].

- Some birds not protected by state or federal law:
- European starlings, English sparrows, feral rock drives, Eurasian collared doves.
- This is a fascinating contradiction of numerous other laws.

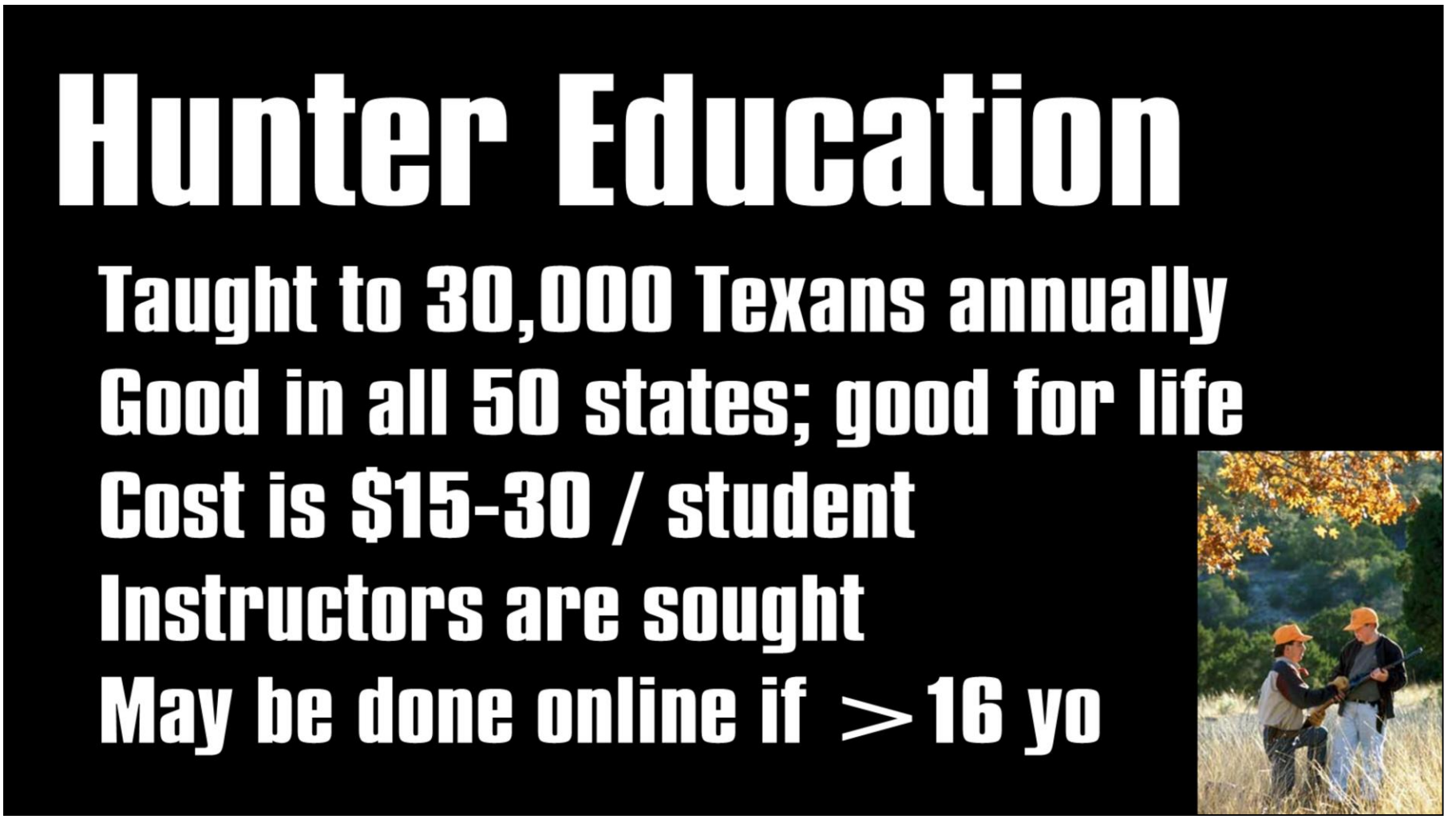
[Photo used under Educational Fair Use provision].

- A citizen science monitoring effort designed to involve volunteers of all ages and interest levels in gathering scientific data on species of concern in Texas through experiential learning.
- The goal of the program is to enable long-term conservation of these species and appreciation among Texas citizens.

{Graphics courtesy of Texas Parks & Wildlife].

• It is interdisciplinary and supplementary and can be used to teach basic skills in science, social studies, language arts, math, art, music and physical education.
• With an unbiased approach to basic wildlife management practices, Project WILD:

  • teaches young people *how* to think about wildlife, *not what* to think...
  • provides a set of fun, hands-on, easy to use educational activities…
  • trains teachers and youth group leaders in an outstanding six-hour, hands on workshop ..
  • includes helpful, scientific background information with all activities...
  • incorporates powerful techniques and methods for teaching problem solving and decision-making skills, and
  • is a program that is kid-tested and teacher-approved!

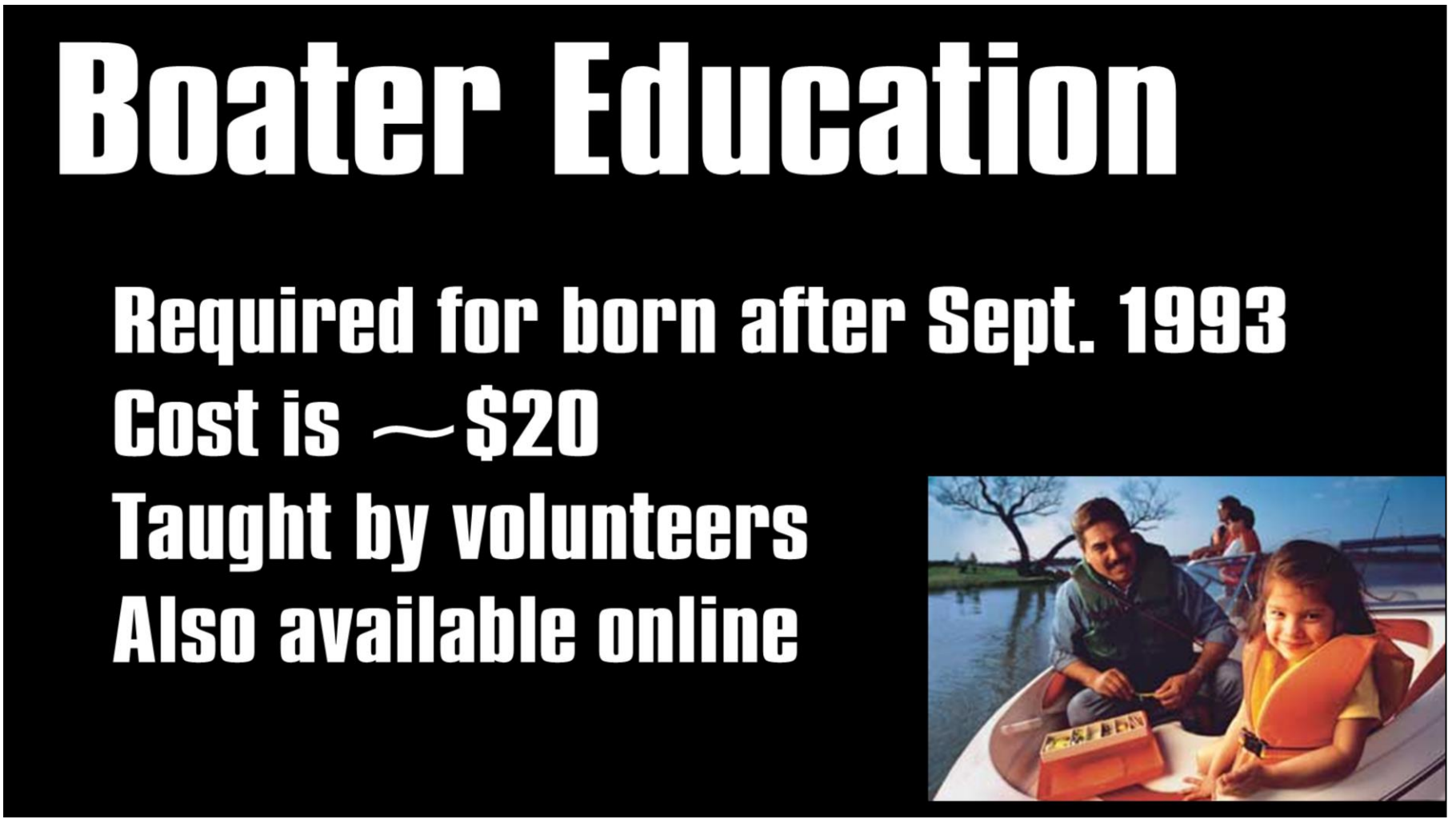


[Photo courtesy of Texas Parks & Wildlife].

- Goals are to reduce hunting related accidents and violations; promote safe, responsible and knowledgeable hunting; and enhance hunting traditions and values.
- More than 2,900 instructors, who include game wardens, volunteers and professional educators.
- Instructors must certify 5 or more students annually to remain active.

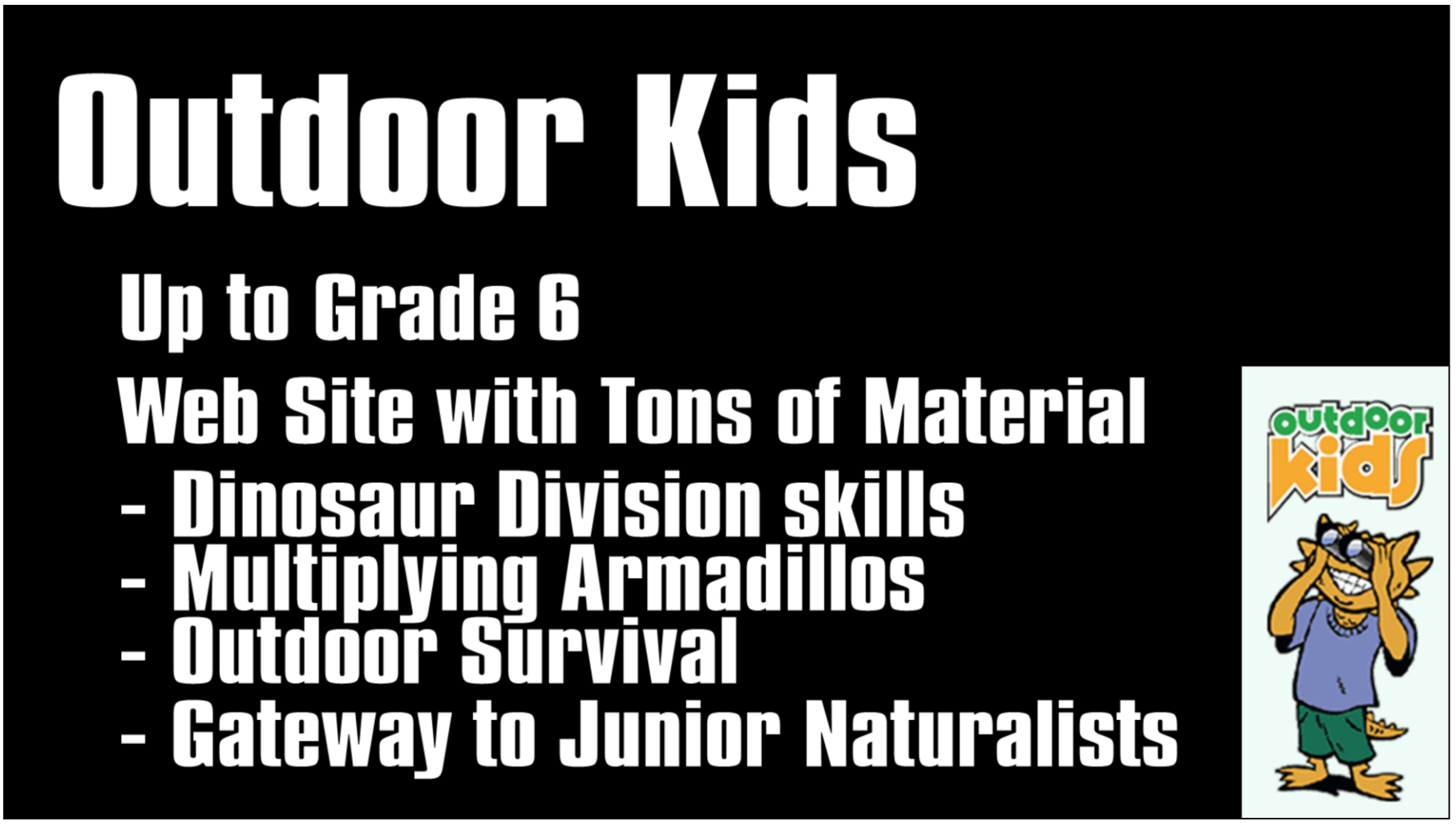
[Graphics & Photo courtesy of Texas Parks & Wildlife].

- Offered by the agency in partnership with local volunteers
- Training workshops around the state
- Highly rewarding experience



[Graphics courtesy of Texas Parks & Wildlife].

• Boating courses are taught by US Coast Guard Auxiliary, US Power Squadron and trained volunteer instructors, as well as teachers, and game wardens.
• With more and more people enjoying the lakes and rivers every year, it's important, for everyone, that boaters educate themselves on boating skills and seamanship.
• Many boat insurance companies now offer discounts upon successful completion of the boater education course!



[Graphic courtesy of Texas Parks & Wildlife].

- Available via department web site at www.tpwd.texas.gov
- From rainy days to broken legs, free resources are available

[Graphic courtesy of Texas Parks & Wildlife].

Kids Online Publications

[Graphic courtesy of Texas Parks & Wildlife]

Example certificate

Biologist Assists

Technical and Land Guidance
Biologists statewide by region
Wildlife Tax Exemption status
Landowner Workshops
Wildlife Management Plans

- These are available at no cost
- Citizens should use the Find a Biologist function at www.tpwd.texas.gov

[Photo courtesy of Texas Parks & Wildlife Foundation]

- Texas Parks and Wildlife Foundation (TPWF) is the non-profit funding partner of TPWD, raising private philanthropy to fund transformational projects.
- Since its inception in 1991, TPWF has raised over $100 million to ensure every Texan can be inspired by the incredible wild things and wild places in Texas.

[Photos courtesy of Texas Parks & Wildlife].

- In May 2017, for example, 39 organizations across the state have been awarded nearly $1.5 million in grants
- Grants help connect Texas communities with their natural environment, provide hands-on environmental education and introduce underserved communities to outdoor recreation skills
- TPWD developed the CO-OP in 1996 to help introduce underserved populations to environmental education, conservation and outdoor recreation programs.
- The CO-OP program is authorized by the Texas Legislature through TPWD's budget as a

specialized component of the Texas Recreation and Parks Account Program. Grants range from $5,000 to $50,000 and may be used to pay for equipment, transportation, liability insurance and up to 40 percent of staffing costs.

- CO-OP grant funding is available to tax-exempt non-profit organizations, municipalities, universities and local school districts.
- Over the last 20 years, nearly 700 grants have been awarded to communities across Texas.

[Photo courtesy of Texas Parks & Wildlife].

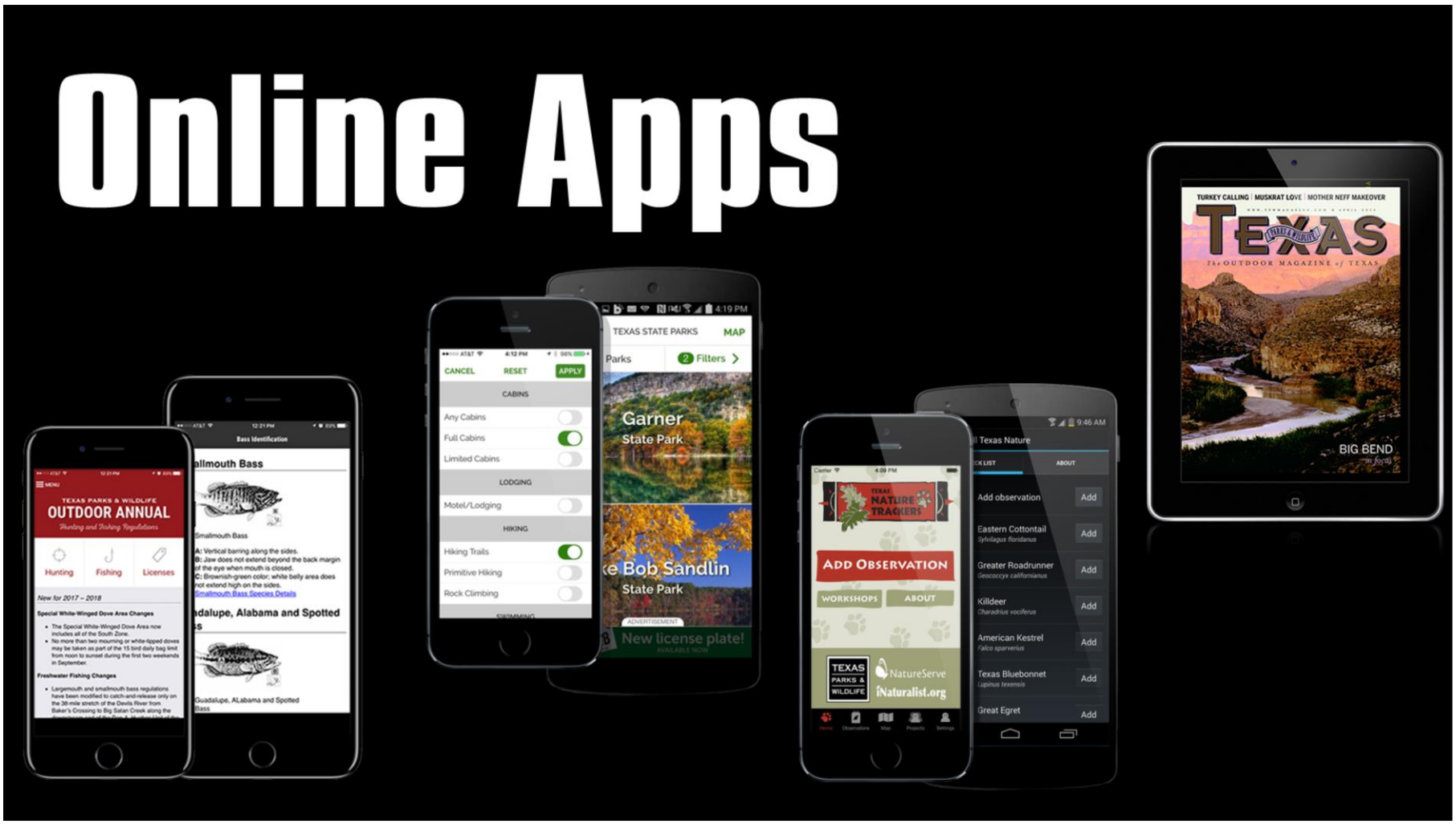
- These occur in a variety of divisions
- They give invaluable experience
- They are highly competitive

[Graphic courtesy of Texas Parks & Wildlife]

- Also an extensive calendar at www.tpwd.texas.gov

[Graphic courtesy of Texas Parks & Wildlife].

- Eight license plate designs
- Outdoor Annual is free and available as an app
- Free podcasts available through the Texas Parks & Wildlife Foundation
- State Parks Guide is free and available as an app
- Magazine costs $10 for 10 issues, or $5 more for digital

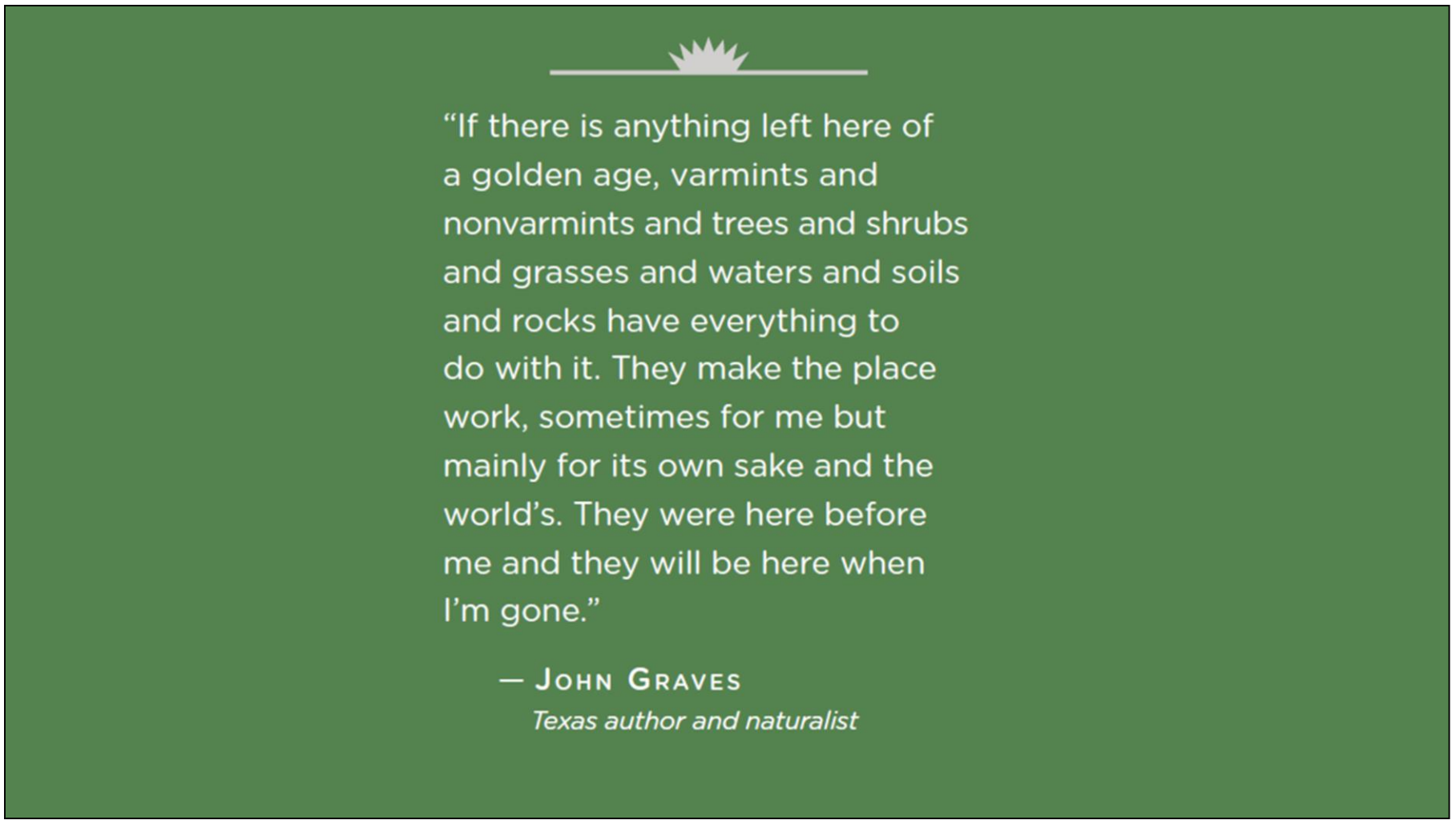


[Photos courtesy of Texas Parks & Wildlife Department]

- There are numerous other free apps available.
- In both iOS and Android systems
- Currently 50% of our rules viewers use an online method, and this is growing
- Over 170,000 of the Outdoor Annual apps have been downloaded in 2017
- We print 2.8 million Outdoor Annuals yearly; this is coming down to 2.3 million in 2018

[Graphics courtesy of Texas Parks & Wildlife].

- Feedback can be given to the commission in a variety of formats



[Taken from Texas Parks & Wildlife Foundation]