Uses & Applications of an Ecological Site Description

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OVER VIEW

- Applications of an ESD
- What can an ESD do for YOU?
- Examples of the USE of ESDs in Florida
Application of an ESD

Fire Management
Woodland Management
Hydrology
Grazing Management
Recreation
Restoration
Invasive Species
Wildlife
What can an ESD do for YOU?

• Help set realistic management objectives by identifying the range of potential states for a given ecological site.

• Serve as the basis for rangeland inventory, assessment and monitoring

• Suggest potential management strategies with effectiveness of different practices on specific ecological sites and states.
MOST IMPORTANTLY !!!

- It provides a visual tool (Road Map) to communicate ecosystem dynamics to the landowner, permittees, agency employees and across agencies.
State 1 – Reference State – Shortleaf/Post Oak Woodland

1.1 – Woodland Community
- Canopy cover 40-70%
- Diverse ground layer
- Early growth shrub layer

1.2 – Woodland & Light Shrub Community
- Increased shrub density
- Understory fine-fuels prime for fire

1.3 – No Overstory Community
- Diverse herbaceous/shrub/sapling ground layer
- Natural regeneration of pines & hardwoods

State 2 – Shortleaf/Post Oak Forest & Dense Shrub

2.1 – Forest & Dense Shrub Community
- Overstory canopy 70-90%
- Mid-story shrubs and overstory saplings established
- Ground-layer grass/forbs growth restricted by closing overstory canopy

2.2 – No Overstory Community

State 3 – Dense Mixed Forest Thicket

3.1 – Dense Mixed Forest Community
- Overstory canopy >90%
- Canopy replacement by shade tolerant, fire intolerant trees
- Mid-story well established
- Ground-layer grass/forbs low to nonexistent

3.2 – No Overstory Community

State 4 – Pine Plantation

4.1 – Pine Plantation Community
- Stocking rate maximized for timber production

State 5 – Forage Suitability Group (FSG)

5.1 – Improved Pasture & Row Crop Community
- Pastures for livestock production
- Crops for food & fiber production

*All states can transition to 4 & 5
**States 4 & 5 can restore to 1
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R2A

R3A

T1A

T2A

T3A

T4A

T5A

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1.1A
1.2A
1.1B
1.2B
1.3A
1.3B

1-Shortleaf/Post Oak Woodland
1. Shortleaf/Post Oak Woodland

1.1 - Forest succession:
1.2 - The role of fire in forest succession
1.3 - Establishment of new vegetation after fire

2 - Climate and vegetation interaction
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2.2A

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T2A
R2A
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2.1

2.2
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5- (FSG)

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Juan Ponce de Leon Discovers Florida in 1513
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