Incorporating the BAECV **Product Into A Fire History** Geodatabase: Mapping Fires Across Florida

> PFC Update Meetings Fall 2018 Casey Teske Joe Noble





Mapping Fires Across Florida



"...methods for monitoring the use of fire on public lands may be one of the greatest unmet needs in comprehensive wildlife management."

-Monitoring Prescribed Burning on Public Lands in Florida, 2006

Mapping Fires Across Florida

- ✓ Develop a spatial database
- Frack prescribed burns conducted in Florida A modified extension of USAF Wildfire Database
- 10 years of FFS FMIS burn permitting data
- Develop methods to validate burn permit records
- Compare to known locations of firesUse remote sensing to derive burn areas
- Develop custom query tools
- Evaluate fire history metrics (e.g., frequency, time-since-burn, etc.)
 Trends in specific fire-dependent species habitats or ecological systems
- Develop procedures for annual updates



Mapping Fires Across Florida

- Summary Reporting Yearly/Monthly Prescribed Fire Acres, Number of Fires, Trends, etc.
- Site Specific Capabilities (e.g., Avon Park, Apalachicola NF, etc.)
 <u>Customizable Queries,</u> <u>Reports, & Dashboards</u>
- Measuring Success
- Access & Administration Controls
- Roles



Mapping Fires Across Florida

- Spatial Component
- Time Since Last Fire
- Integration with Ecological Data



Distribution of Acres Authorized



Mapped Distribution of Authorizations— Yearly

2008



Mapped Distribution of Authorizations-Monthly

































What's Next?

- We are exploring: Extra satellite detection opportunities A BAECV Southeast "variant" Thresholds for different latitudes, ecosystems

- We would like to:
 Advance the database and the BAECV product
 Complete fire history 1984 present
 Understand the long-term database

 - Understand user needs:
 Understand user needs:
 What fire metrics are needed?
 Fire dependent species analyses
 Others...



Contacts

Joe Noble jnoble@talltimbers.org

Casey Teske cteske@talltimbers.org

More about BAECV: Hawbaker, T.J., Vanderhoof, M.K., Beal, Y.G. J.D., Schmidt, G.L., Falgout, J.T., Williams, B. Brunner, N.M., Caldwell, M.K., Picotte, J.J., Hoursel C. M. Stitt, S. and Davane, L.J.,

