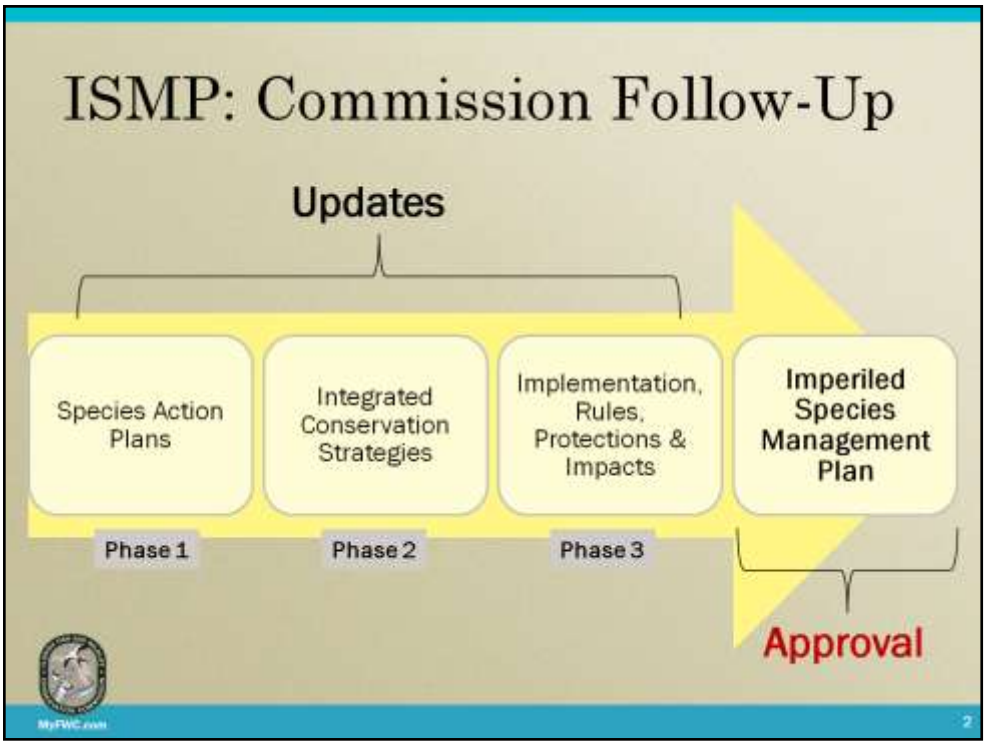
This presentation provides an update on the Imperiled Species Management Planning and Implementation effort that is underway.

Photos (clockwise from top left): Key ringneck snake, Black skimmer and chick, Florida bog frog, Southern tessellated darter, and Sanibel Island rice rat

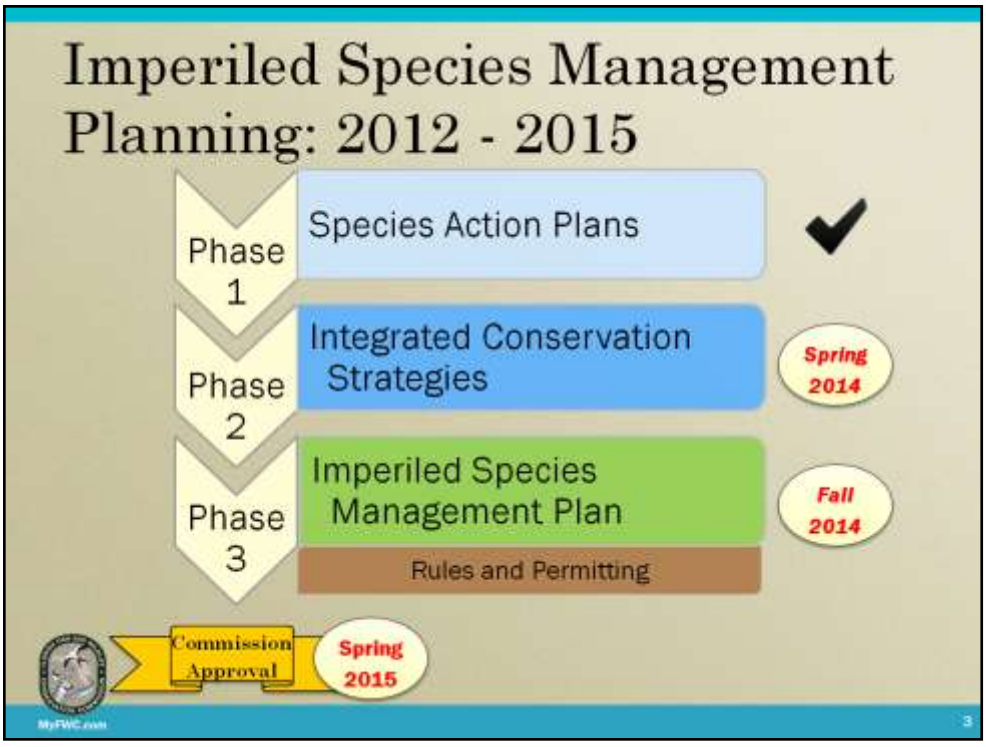
October 2013

Prepared by Laura Barrett



As the Imperiled Species Management Planning (ISMP) process is a multi-year project, periodic updates are provided to the Commission. Previous updates were presented at the December 2012 and June 2013 meetings. Today's update will address the completion of the Species Action Plans and the ongoing development of Integrated Conservation Strategies. Future updates will address implementation, proposed rule changes, evaluated permitting and non-permitting alternatives, and anticipated impacts for implementing or not implementing the Imperiled Species Management Plan.

The Florida Fish and Wildlife Conservation Commission (FWC) has undertaken the ISMP process to improve conservation of Florida's imperiled fish and wildlife in concert with the 2010 revisions to the state imperiled listing rules. Since those rule changes, the FWC has conducted Biological Status Reviews of all state listed species and has begun development of a comprehensive management plan for state listed species. This ISMP aligns efforts throughout FWC and integrates conservation actions across programs and functional areas. Additionally, this effort and many of its elements align well the themes and guiding concepts that came from the Oct. 9, 2013 Commission meeting on strategic visioning.



Imperiled Species Management Planning will continue through 2014 and culminates with the preparation of a comprehensive, integrated Imperiled Species Management Plan that will be brought before the Commission as a draft in the fall of 2014 with associated draft rules and permitting guidelines and/or permitting alternatives. As pre-cursors and building blocks for the final plan, Species Action Plans have been developed (completed November 2013) and Integrated Conservation Strategies are being developed through the spring of 2014.

This planning process is utilizing adaptive management principals, incorporating feedback and adjusting as needed, and is stakeholder inclusive. FWC staff plan to incorporate creative solutions to the challenge of effective management and conservation of Florida's imperiled species. Partners and stakeholders play a key role in identifying solutions and helping to implement them.

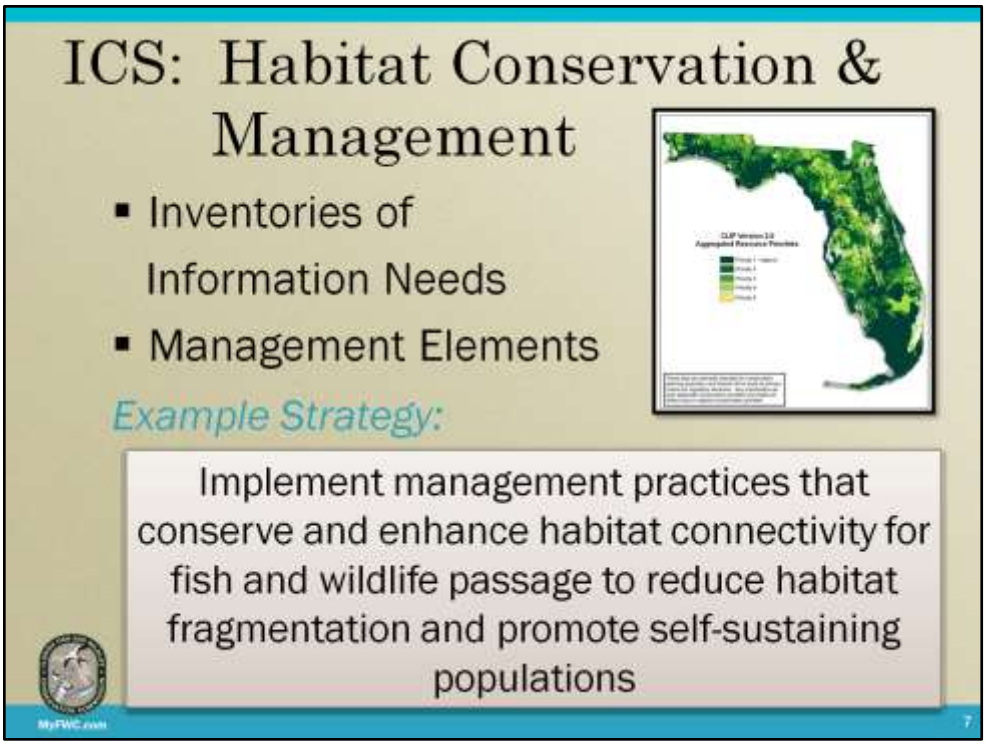
Phase 1 of Imperiled Species Management Planning, the development of Species Action Plan final drafts, is now completed. Fully accessible documents meeting Section 508, Rehabilitation Act, standards will be available in the near future at www.MyFWC.com/wildlifehabitats/imperiled. Stakeholder input has been incorporated into the final draft Species Action Plans that were developed over the last 18 months. The Species Action Plans are intended to be living documents and will be improved and revised as new information is received and can be incorporated. The completion of these Species Action Plans is a significant accomplishment that involved many partners and stakeholders and over 100 staff across the agency.

Photo (inset): Pine Barrens tree frog

Phase 2, which began this summer and will continue over the next year, includes the development of integrated conservation strategies. The purpose of the integrated conservation strategies development is to focus toward efficiencies and improved conservation benefit for imperiled species. The Wildlife Conservation Prioritization and Recovery (WCPR) program is an excellent example of an integrated approach for improved imperiled species management on FWC's Wildlife Management Areas (WMAs). FWC staff is working to identify, evaluate, improve, and/or recommend other integrated approaches like WCPR to facilitate improved conservation for Florida's imperiled species. And just as stakeholder input was sought on drafted Species Action Plans, draft integrated conservation strategies will also be enhanced with stakeholder contribution. Integrated Conservation Strategies development and refinement will continue through June 2014.

The integrated conservation strategies are being aligned and evaluated across five focal areas – Habitat Conservation and Management, Research and Monitoring, Incentives and Influencing, Education and Outreach, and Law and Policy. These five focal areas will address common themes and emerging issues for the 60 species. A dynamic that cuts across all of these areas is adaptation to the changing climate. Therefore, staff is implementing adaptation planning within each of the five focal areas.

Photo (inset): Southeastern American kestrel (top right), prescribed fire on public lands (bottom right)



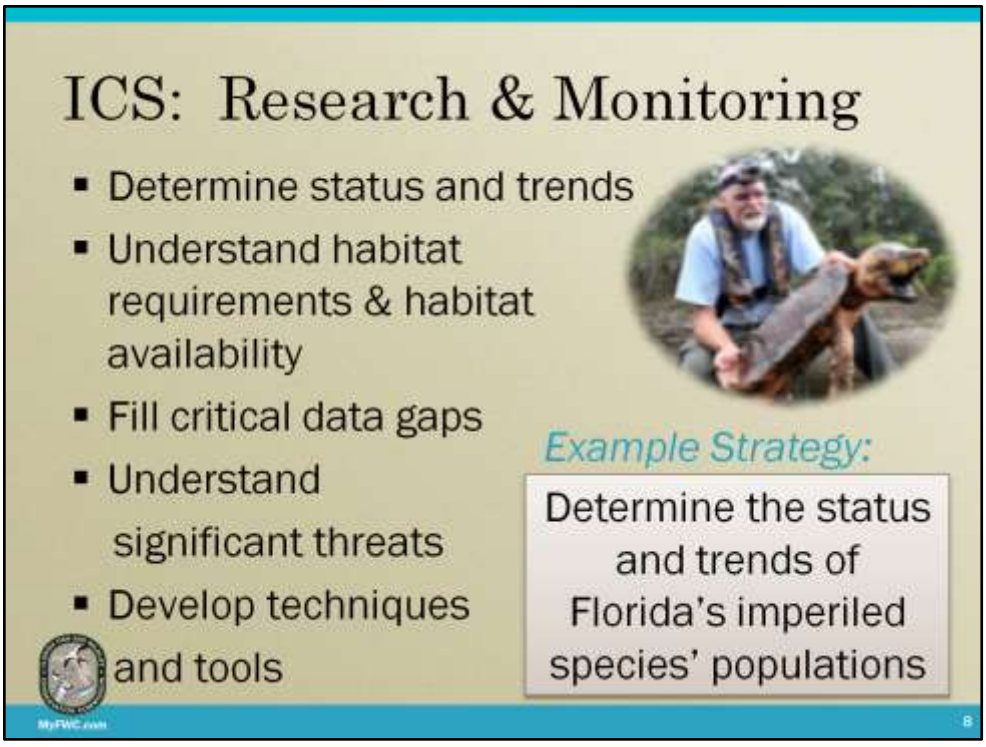
The Habitat and Conservation Management ICS team has identified two main themes from the Species Action Plan actions. These themes are: 1) Inventories of information needs of habitat for listed species (the what do we have, what do we need, and where do we need it data requirements to manage habitat for listed species); and 2) Management elements (the application of conservation measures such as restoration, enhancement, maintenance and acquisition of habitats supporting listed species). This ICS addresses an area of emphasis from recent Commission discussions on strategic needs for fish and wildlife., namely the importance of conserving the habitat base that sustains Florida's fish and wildlife. The team has begun drafting strategies and will continue to refine and calibrate with other ICS teams.

An example strategy that addresses species conservation actions associated with the threat of habitat fragmentation and/or loss of connectivity includes:

> Implement management practices that conserve and enhance habitat connectivity for fish and wildlife passage to reduce habitat fragmentation and promote self-sustaining populations.

An example of this approach is the conservation of upland habitats like longleaf pine where work for imperiled species will benefit many other species such as bobwhite quail.

Photo (inset): Critical Lands and Waters Identification Project (CLIP) Version 2.0 Landscape Resource Priorities map



The Research and Monitoring ICS team has determined that the highest priority is to develop a comprehensive monitoring plan that identifies the current monitoring status for each imperiled species, the monitoring needs for each species directly relevant to their listing criteria, and an approach to meeting those needs including any research that must be conducted in order to determine an appropriate monitoring strategy.

The second priority is to increase knowledge of habitat requirements and historic, current, and potential species distributions so that priority habitats for all imperiled species can be confidently monitored for changes.

The third priority is to fill data gaps necessary to conserve each of Florida's imperiled species. Data gaps include genetic studies to determine taxonomic validity, demographic and life history studies to determine meaningful population objectives, and surveying species occupancy in suitable habitat.

The fourth priority is understanding the significant effects of disease, contaminants, invasives, and climate change on imperiled species.

The last priority is to develop techniques and tools to better understand the imperiled species and their status. This includes developing and maintaining data libraries and databases, programs that support citizen science contributions to monitoring efforts, and development of tools that identify conservation approaches to conserve imperiled species such as GIS and human dimensions products.

An example strategy includes:

Determine the status and trends of Florida's imperiled species' populations.

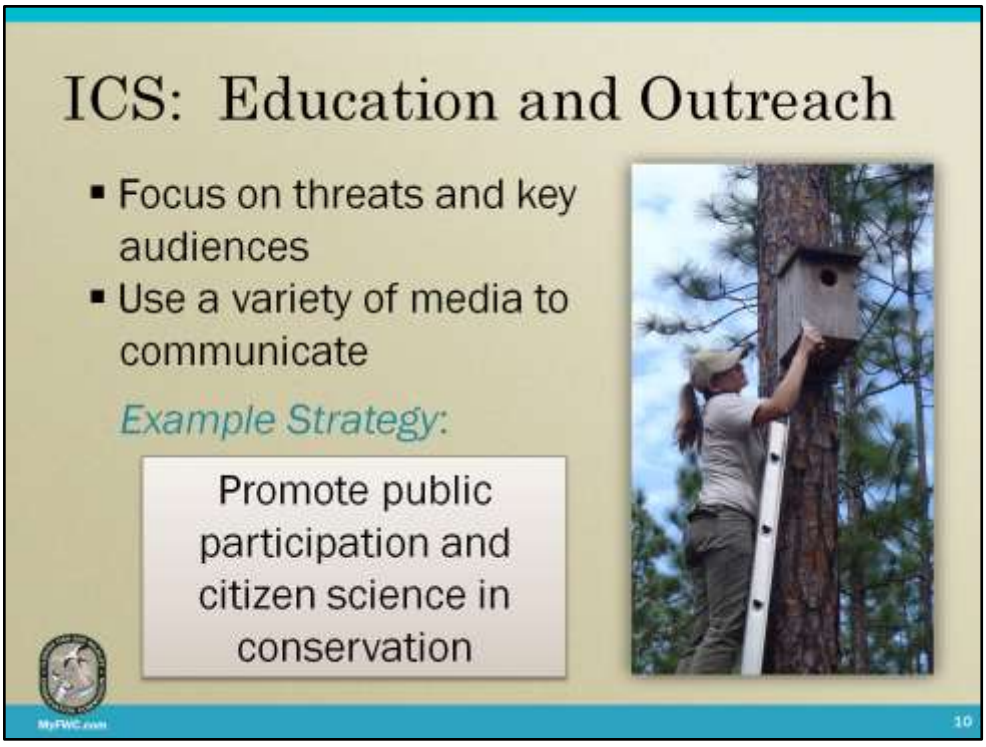
Photo (inset): FWC staff with an Alligator snapping turtle

Another area of overlap with Commission discussion at the recent strategic visioning meeting is incentives for landowners to continue practices beneficial to fish and wildlife. The objective of the Incentives and Influencing ICS is to incentivize partnerships with and effectively influence habitat management by both public and private landowners and managers. The focus of these strategies will be to: 1) incentivize partnerships through increased effectiveness of existing incentive programs (e.g. targeting incentives to corridors or Optimum Resource Boundaries of WMAs), by developing new incentive models such as Payment for Ecosystem Services, and by coordinating regulatory incentives like Habitat Conservation Plans and Candidate Conservation Agreement with Assurances to address landscape-scale, multispecies conservation; and, 2) influence habitat management decisions by public and private landowners through coordination with growth management, regulatory reviews, and regional planning, and by developing comprehensive habitat management recommendations and providing technical assistance. Wildlife Best Management Practices will be an important component of regulatory incentives and streamlining for agricultural operations.

An example strategy addressing incentivizing partnerships includes:

> Promote the conservation and management of threatened species habitat on public and private lands through the use of economic and regulatory incentives.

Photo (inset): Bluenose shiner courtesy of Todd D. Crail



The Education and Outreach ICS team is focusing on how education and outreach techniques can be used as one more management tool to affect species. The Education and Outreach team has taken an approach to examine all the threats facing each species and look for common pressures and concerns. That information, along with the actions from each of the species Action Plans, allowed the team to identify Key Target audiences which were contributing to those threats. Again, it is exciting to see so much overlap with this same topic that was identified at the recent Commission strategic visioning meeting.

The team is currently developing three main strategies that identify the most important issues and is creating clear and consistent messages that will apply to these themes.

An example strategy addressing how citizens can make a difference for wildlife at their homes and in their commmunity includes:

Promote public participation in citizen science in conservation.

As with many other topics, there is excellent potential to leverage work for imperiled species with other conservation needs as we strive to involve more people from more diverse backgrounds into fish and wildlife conservation.

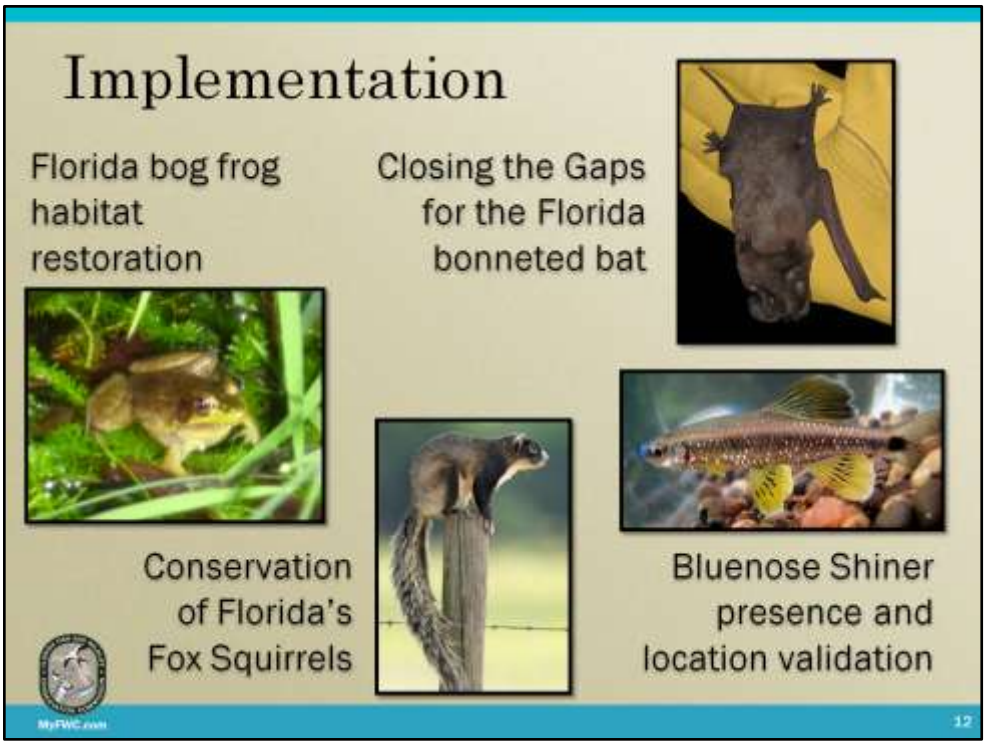
Photo (inset): Southeastern American kestrel box monitoring by a volunteer citizen scientist

Forty-one of the 60 species included in the Imperiled Species Management Plan have been recommended to remain as state-listed Threatened or Species of Special Concern per Chapter 68A-27, Florida Administrative Code. The Law and Policy ICS team is evaluating the need for protective rules for those species that no longer warrant listing, as well as any additional rule language for those remaining listed. Training is being developed for FWC's law enforcement officers to provide species-specific threats and support law enforcement presence at the highest priority areas during the most significant times of year. Additionally the Law and Policy ICS team is discussing and will determine with stakeholder input an appropriate permitting system for imperiled species. Permitting and non-permitting alternatives are being considered with the intent to produce guidelines for when permitting is appropriate and how permitting will be addressed. This team is also considering current policy issues brought up in the Species Action Plans as well as anticipated future policy issues and guiding principles emerging from the Commission meeting on strategic approaches to conservation in Florida.

An example strategy addressing the need to evaluate an appropriate permitting system includes:

> Establish and maintain an efficient and effective system to address intentional and incidental take of listed species while furthering the goals and objectives of the Imperiled Species Management Plan.

Photo (inset): Disturbing seabirds and shorebirds



Even though the Imperiled Species Management Plan development will continue into 2015, a focus toward improved imperiled species management is already underway. Reiterated throughout the Species Action Plans is the need to fill data gaps on the species and their habitat. Obtaining additional information will allow for improved conservation management decision-making. Projects, such as those identified on this slide, that are funded with agency trust funds, as well as state and federal grants, will fill data needs, improve or protect habitat, and expand partnership opportunities.

Clockwise from top right:
Closing the Gaps for the Florida Bonneted Bat (E*umops floridanus).* This 3-year project beginning in 2013 is funded by a State Wildlife Grant and led the University of Florida, North Florida Research and Education Center. The focus of this project is to determine habitat types and preferences, identify likely roost areas, estimate population growth, recruitment, and survival. With the data gathered, the project team will then produce recommendations for two monitoring protocols for bonneted bats. Ultimately the project team intends to build collaborations that hopefully will lead to longer term cooperation in monitoring the species beyond the scope of the project.

The Bluenose shiner (*Pteronotropis welaka*) is proposed as state-threatened and is one of three fish included in the Multi-Species of Greatest Conservation Need Fish Population Presence and Location Validation 3-year project beginning in 2013 led by the University of Florida and funded by a State Wildlife Grant. The project goals are to validate historic and new collection sites for three species, establish current population locations and estimate density for these species to allow future determination of management impacts to populations and aid in establishing improved management protocols. Information obtained in this study has the potential to avoid emergency listing of the Black-banded sunfish (*Enneacanthus chaetodon*) and future listing of the Snail bullhead (*Ameriurus brunneus*) and will seek to validate known threats and identify any new threats to the immediate and long-term survival of these three species.

A State Wildlife Grant funded a project beginning in 2012 for data gathering and analysis for Florida's fox squirrels, two of which are state-listed. Sherman's fox squirrel (*Sciurus niger shermani*) remains a Species of Special Concern and the Big Cypress fox squirrel (Sciurus niger avicennia) remains a Threatened species. University of Florida staff lead this project that is focused on determining the level of evolutionary distinction among Florida's fox squirrel subspecies, developing and evaluating survey protocols, developing state-wide distribution models, and determining influences of habitat structure and management, as well as urbanization and habitat fragmentation, on fox squirrels.

Restoration of Florida bog frog habitat funded in 2012 by the Aquatic Habitat Restoration/Enhancement (AHRE) subsection in the FWC's Division of Habitat and Species Conservation is already yielding successful results. Surveys in 2013 have confirmed bog frogs are moving in to the restored area where titi was removed next to a known bog frog site to expand the habitat.

Imperiled Species Management Planning work for the remainder of 2013 and into 2014 will include continuing partner and stakeholder engagement as FWC staff completes Integrated Conservation Strategies, develops an integrated implementation approach, permitting alternatives, rules and impacts assessment, and finally drafts the Imperiled Species Management Plan.

Photo (inset): Limpkin with chick

Questions on the Imperiled Species Management Plan may be directed to Laura Barrett, Imperiled Species Management Plan Coordinator, by E-mail at Laura.Barrett@myfwc.com or by telephone at 850/921-1034.