



The Delaware Wildlife Action Plan 2015-2025

Keeping today's wildlife from becoming tomorrow's memory.

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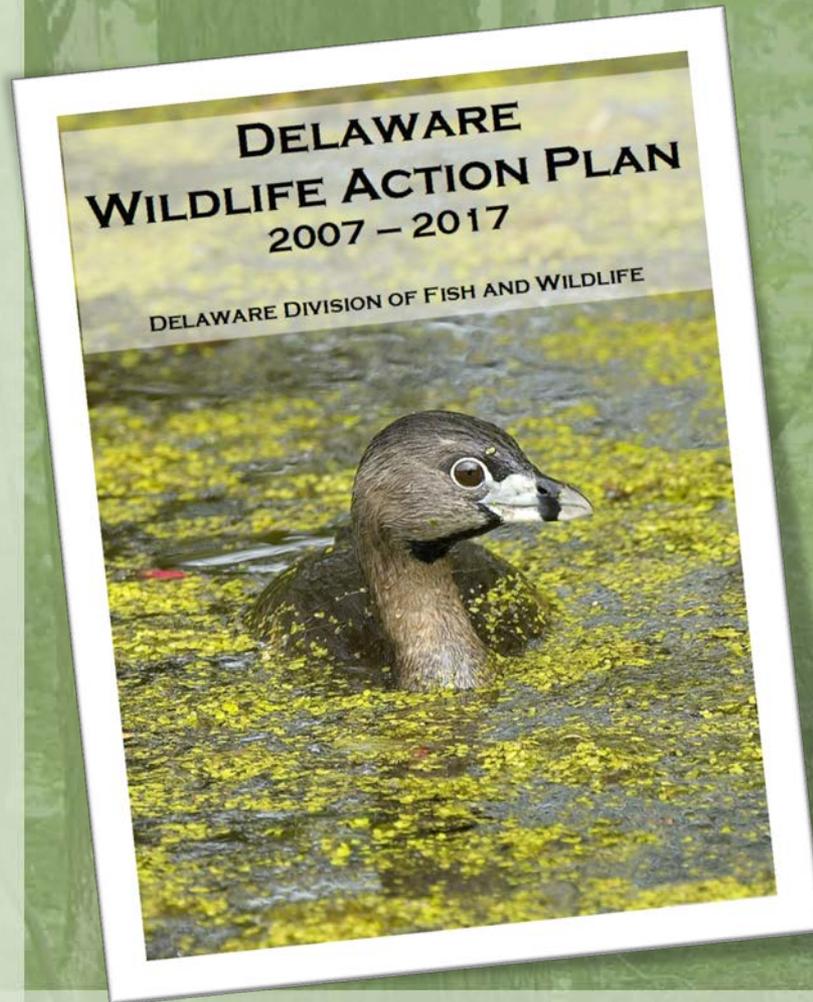
*We Bring You Delaware's
Great Outdoors
Through Science and Service*

Wildlife Diversity in Delaware

- More than 2,800 species in Delaware:
 - Amphibians
 - Birds
 - Mammals
 - Fish
 - Mollusks
 - Insects
 - Reptiles
 - Others



Delaware Wildlife Action Plan: 2015

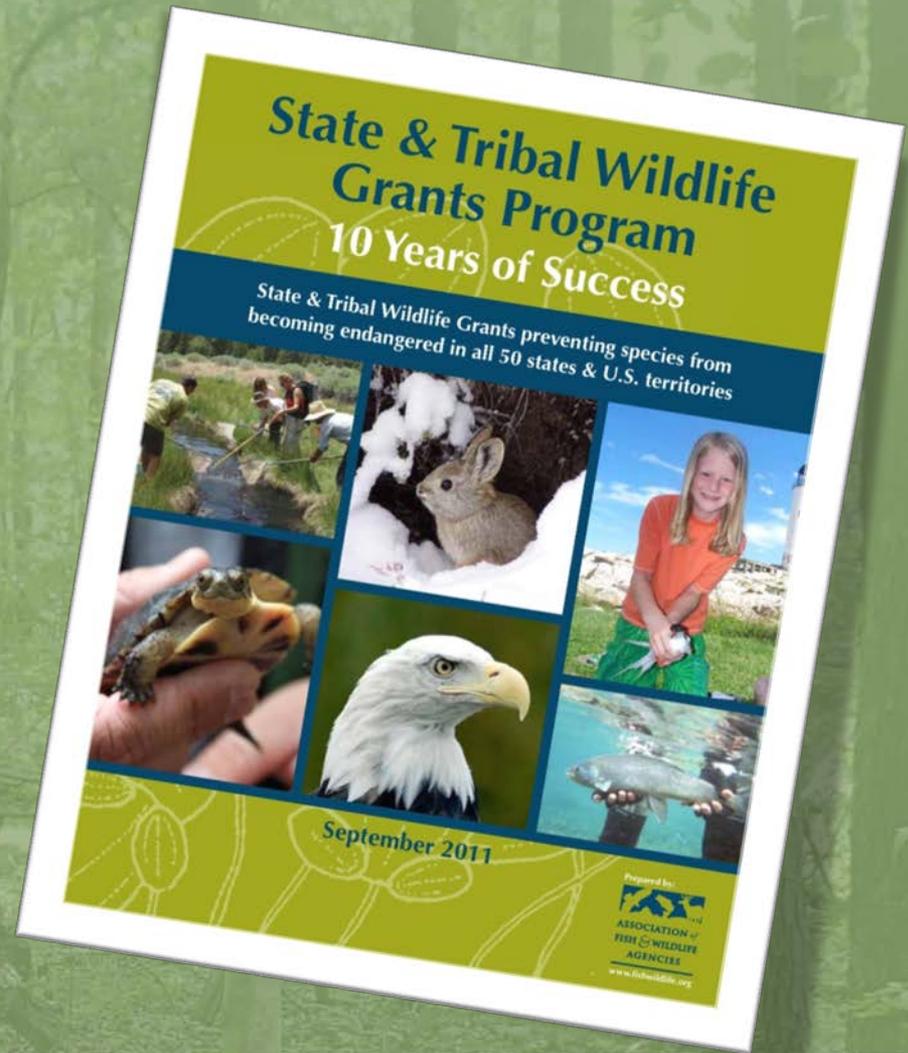


- Ten year strategy
- A blueprint for conserving diversity at local, state, regional, national and international scales.
- Available to everyone
- Applicable at many scales, local – national
- Public input and participation



Why Do We Need an Action Plan?

- Legislative Mandate coordinated through the USFWS
- Eligible for funding through State Wildlife Grants Program, annually appropriated by Congress
- Addresses Species of Greatest Conservation Need, their associated habitats and many other wildlife-related challenges
- Builds in the foundation of Delaware's existing conservation efforts



Why Do We Need an Action Plan?



- Provide an updated, renewed vision and direction for wildlife conservation in Delaware for the next decade.
- Engage partners in identifying and prioritizing species, habitats, threats, and actions
- Build and strengthen interagency and intra-agency partnerships through the WAP
- Encourage ownership of WAP by partners and broader constituency of the Teaming With Wildlife coalition



TEAMING WITH WILDLIFE
a natural investment



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Eight Required Elements

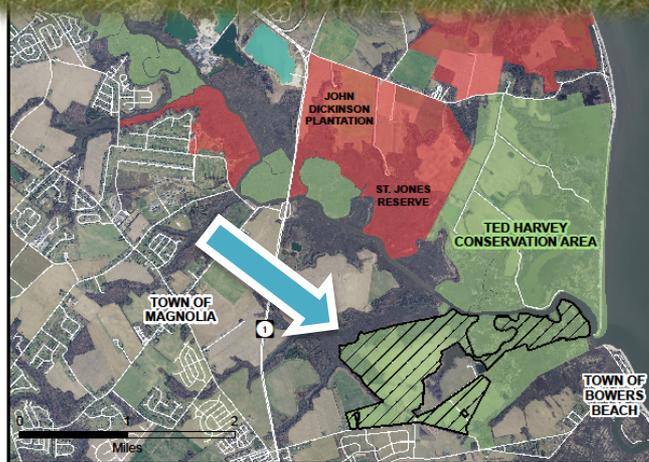
- Species of Greatest Conservation Need
- Key Habitats
- Prioritized Conservation Issues
- Prioritized Conservation Actions
- Monitoring, Measuring Effectiveness, Adaptive Management
- Plans for future Review and Revision of the SWAP
- Coordination with Partners



Past Projects & Successes



- **Habitat Protection with Partner Support**
 - Acquisition of 748 acres, protecting more than 320 acres of wetlands along the St. Jones River and preserving habitat for wetland-dependent SGCN and regional priority species.
- **Species-specific Conservation Plans**
 - The Delmarva Fox Squirrel, now federally delisted, will benefit from a state-level conservation plan.
 - Actions recommended in the plan support habitat and wildlife management planning for forested lands in Delaware's Wildlife Action Plan and the Delaware Forest Service's Strategy and Resource Assessment.



DELAWARE BAYSHORE CORRIDOR PROTECTED LANDS
KENT COUNTY, STATE OF DELAWARE

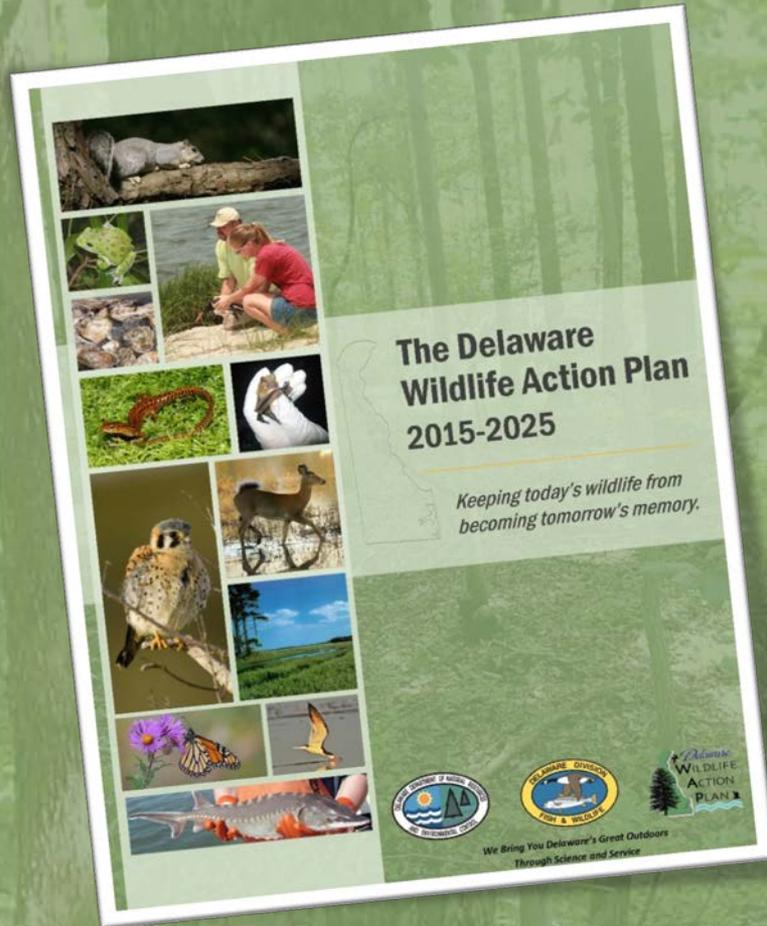


Past Projects & Successes

- **Closing knowledge gaps:**
 - Intensive bird survey work through the second Delaware Breeding Bird Atlas mapped the distribution of nesting birds across Delaware and examines changes between the current state and the distribution 20+ years ago.
 - Increased knowledge of invertebrate species presence and distribution
 - Underwing moth surveys identified new locations for rare species and documented species new to Delaware's fauna.



Moving Forward: The Next 10 Years



- End Product: A User Friendly Plan
- Increased Accessibility, Specificity, Tractability and Cooperation
- Provide functional guidance for anyone interested in making sound decisions regarding:
 - species & habitat monitoring and management
 - resource allocation
 - land conservation and restoration
 - addressing priority threats and actions.



Case Study 1: Local Conservation Issue

Level 1

- Invasive Non-native/Alien Species/Diseases

Level 2

- Invasive Species

Level 3

- Japanese Stiltgrass (*Microstegium vimineum*)

Issue includes threats from non-native and native plants, animals, pathogens, microbes or genetic materials that can have harmful effects on biodiversity. Note lack of forest floor diversity – loss of key habitat for ground-nesting bird SGCN, native insects SGCN, etc.



Case Study 1: Local Conservation Action

Level 1

- Direct Management of Natural Resources

Level 2

- Invasive Species Control

Level 3

- Plant – Biological

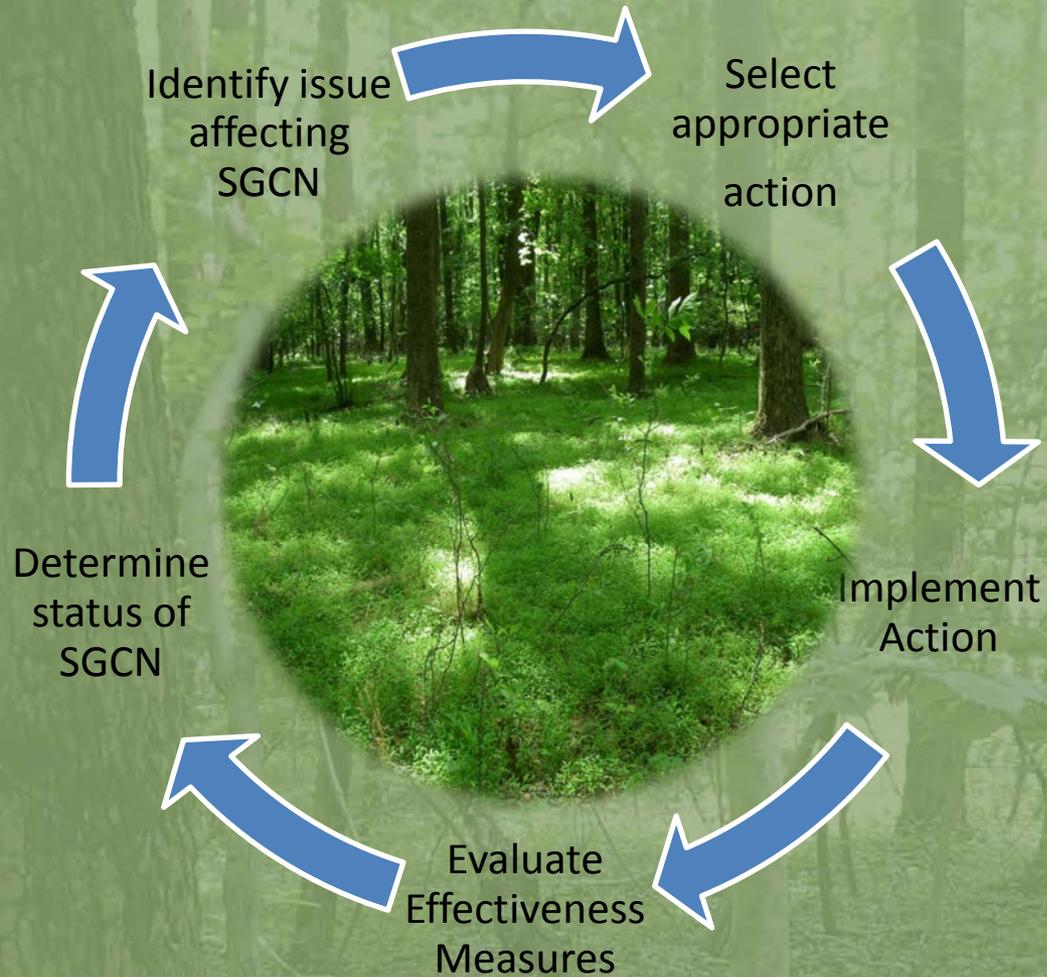
Performance Measure

- **Acres treated/restored**

The Plan identifies an issue – invasive stiltgrass. The Plan goes on to identify the action needed at a local level, broad enough to be flexible in method. Treatment methods may vary by location, scale, regulation or capacity.



Case Study 1: Local Conservation Outcome



Case Study 2:

State-wide Conservation Issue

- Data Needs – one of the greatest statewide threats to SGCN
- Details about habitat needs and associations can identify which challenges are faced by data-deficient SGCN
- Loss of systematic expertise
- Broad groups in need of work



Case Study 2:

State-wide Conservation Action

**Resource
Management
Needs:**

Data
Collection
and Analysis;
Research,
survey, or
monitoring -
habitat;
Baseline
inventory

Action 1: Conduct research to better characterize the biology of SGCN and the ecology of key habitats as necessary to support adaptive management.

Action 2: Conduct surveys to more fully document the current distribution and condition of key habitats.

Action 3: Conduct surveys to more fully document the current distribution and status of SGCN, especially in Key Habitats.

Action 4: Develop protocols for timely review and revision of all Natural Heritage ranks to maintain currency of SGCN and key habitat lists.



Case Study 2:

State-wide Conservation Outcome

- Increase Partner Participation
- Solicit Public Input
- Targeted Survey Efforts for High Priority Taxa
- Academics, Conservation Organizations, Citizen Science



Delaware
Breeding Bird Atlas
2008-2012



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Case Study 3: Emerging Issues



- Climate Change
 - Modeling predicts major changes throughout the 21st Century
 - Distributions and phenology of plant and animal populations change
 - Habitat migration
 - Extreme weather
 - Sea level rise



Case Study 3: Planning Actions

Action: Coordinate with local governments, communities, etc. for climate change adaptation projects and planning.

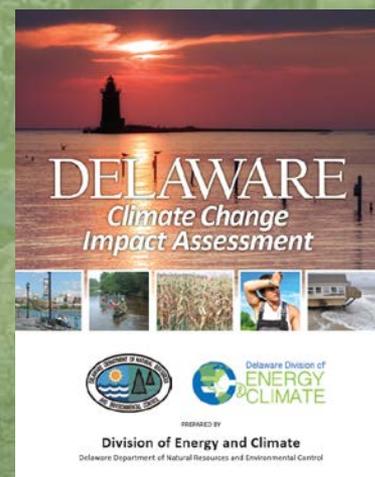
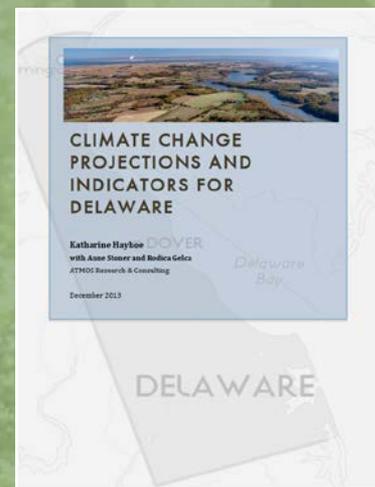
Action: Design and implement restoration activities to slow loss of coastal habitats, including the use of BMPs and habitat restoration.

Action: Incorporate climate change into land stewardship decisions for all conservation lands.

Action: Plan for increasing demands for shoreline management and beach preservation.

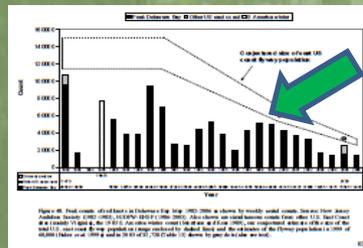
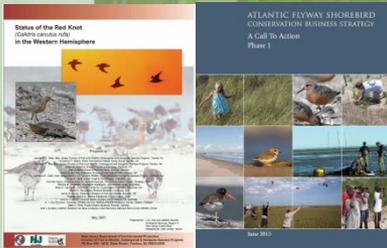
Action: Prepare to restore ecological integrity of unique ephemeral wetlands.

Action: Prepare to restore riparian buffers.



Next: Web-enabling the Plan

On the web, we can use graphics, links, and dynamic data presentations to replace database chains, leading to...



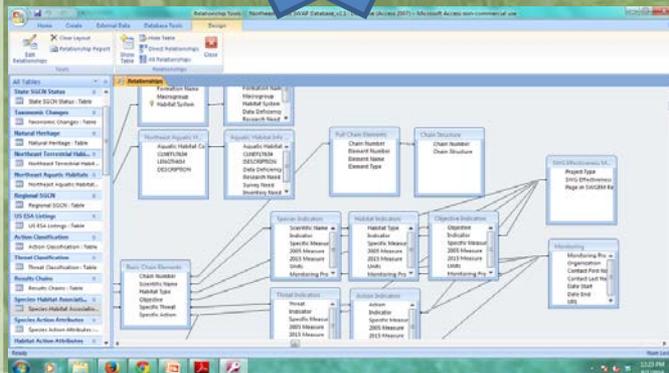
Proper planning...

And solid objectives...

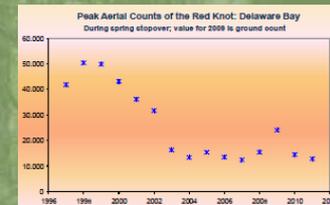
Increased effectiveness of conservation actions...



That reduce issues...



And benefit species and habitats in measurable ways



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Final Thoughts

- Anticipated USFWS approval in April/May
- Development of web-enabled platform next.
- Regional (USFWS R5) roll-up, Regional SGCN, Regional Conservation Opportunity Areas in coming months.
- Don't leave it on the shelf! Help build stronger conservation action to keep today's wildlife from becoming tomorrow's memory!

QUESTIONS or COMMENTS?

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