Regional Overview of Current Terrapin Collaboration

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Will Selman, Millsaps College, Gulf Coast Regional Co-Chair, Diamondback Terrapin Working Group - presented a version of this material at TSA in NOLA last year

Amanda Willard, University of North Carolina-Wilmington, Diamondback Terrapin Working Group, National Co-chair
Part One: Diamondback Terrapin Working Group Gulf coast regional planning

Part Two: An example of collaboration in developing a proposed regional project
Diamondback Terrapins (Distribution)

From: Hart and Lee, 2006
Diamondback Terrapins (Habitat)
Diamondback Terrapins (Threats)
Diamondback Terrapin Working Group

National leadership team
5 regional working groups;
  Gulf Coast, Florida, Southeast, Mid-Atlantic, and Northeast

Gulf Regional DTWG meeting 2-25-2015 (Lafayette, LA)
Facilitator led planning effort to assess research, conservation, and education efforts directed at Gulf Coast terrapin populations.

First step to gauge interest and likely participation.

This was the first meeting of the regional group in several years, an inventory of current efforts and a needs assessment was justified.

Also this was an effort to produce a tangible product that would foster and support participant efforts.
Workshop attendees self-selected to attend one of 3 groups:

Research: ~20
Conservation and Management: ~10
Education/Outreach: ~5

Each group met to conduct a situational analysis and GAP analysis in the given break-out session.
There is a whole universe of planning out there, the type of plan you choose needs to be appropriate to your goals.

Species Management Plans  
Watershed Plans  
Conservation Action Plans  
State Wildlife management Plans

Successful plans link to funding sources, conservation priorities, research needs, and connect to other plans to enable implementation.

Should include goals, measurable objectives, situational analysis, threat assessments, scope, strategies, and action items.

What is your goal, how are you going to get there, and how will you track success?
Research Section Summary

Action Items

- Diamondback Terrapin Population Ecology
  - Animal health (baseline physiological data)
  - Survivorship of all life stages
  - Distribution in poorly studied areas (e.g., mid-coast TX)
Research Section Summary

Action Items

– Habitats
  • Nesting
    – Site selection (fine scale), substrates (temps in diff types)
    – Predation – Who are the predators and their behavior?
    – Site restoration – suitability of restored sites
  • Marsh
    – What areas do they utilize, salinity tolerance, marsh health connection to terrapin populations (fragmentation/channelization)
    – What size of marsh is needed to support a viable population?
- Prey Communities --- collaborate with specialists (crabs/snails)
- Isolation/Connectivity – Why are DBTs patchily distributed?
- Crab Fisheries
  • Determine “hotspots” between DBT populations and fishery
  • Derelict trap studies, crab trap surveys
- Behavior
  • Hatchling dispersal, winter habitat use, behavior of displaced individuals (e.g., after hurricanes), social behavior
- Translocation/reintroduction
  • Does it work? Feasibility of translocating adults
- Develop a Gulf Coast study site network
Challenges

- Money difficult to receive for terrapins because they aren’t a listed species
- Conservation efforts not typically related to habitat (if so, mostly nesting)
- Little coordination currently with other groups who have similar interest (i.e., bird nesting and terrapin nesting habitat often overlap); conservation of multiple species
Action Items

- Management Plan for the Gulf of Mexico Region
  - Develop management goals to inform:
    - Management recommendations
    - Mitigation actions
    - Best management practices
  - Develop Maps for the Gulf of Mexico
    - “Essential” habitat
    - Protected areas
    - Known terrapin localities and nesting beaches
    - Areas with high commercial fishing activity
Education/Outreach Section Summary

Action Items

– Educator Toolbox
  • Best outreach practices to public/target audiences, promote DBT website, social media

– Expand reach outside DTWG via Facebook
  • Derelict crab trap removals
  • Volunteer opportunities
  • General audience science reports from active research
From 2017 RFP:

The Wildlife and Fisheries Team seeks to fund one to three (1-3) projects focused on one of the following focus areas:

- Identify and catalog key beach nesting and foraging areas for species of concern (i.e. seabirds, sea turtles, diamondback terrapins, beach mice, and piping plovers).
- Quantify/catalog species use of oyster reefs Gulf-wide.
- Develop habitat/species linkages for coastal marine habitats.
Application of Coordination

GOMA Gulf Star Program - PROPOSAL

Created a Project Advisory Team from stakeholders identified through the DTWG.

Gathered input from team and stakeholders, letters of support and/or commitment.

Proposal submitted by the National DTWG
PI, Amanda Willard, UNC- Wilmington, DTWG Co-chair
Objective 1: Identify key nesting areas, current and historic.

Objective 2: Evaluate current beach habitat for health and viability and potential threats. Recommendation strategies for protecting nesting beach habitat.

Objective 3: Engage stakeholders and model a small collaborative projects to support larger regional efforts.
GOMA Gulf Star Program- PROPOSAL

Proposal links back to DTWG research and conservation actions while supporting state and regional planning.
Results may help inform conservation and restoration efforts across the Gulf where terrapin nesting habitats intersect with restoration investments.
Application of Coordination

At a state level, the DTWG may contain or help identify possible collaborators with overlapping research and conservation goals.

At a regional level, the DTWG has demonstrated the ability organize and collaborate across state lines, this would be useful when considering outcomes that effect at a regional scale.

Please note that not every terrapin stakeholder is a member of the DTWG, so when/if considering stakeholder outreach this is a good place to start but shouldn’t be the end point.
Questions/ Comments

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Diamondback Terrapin Working Group
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