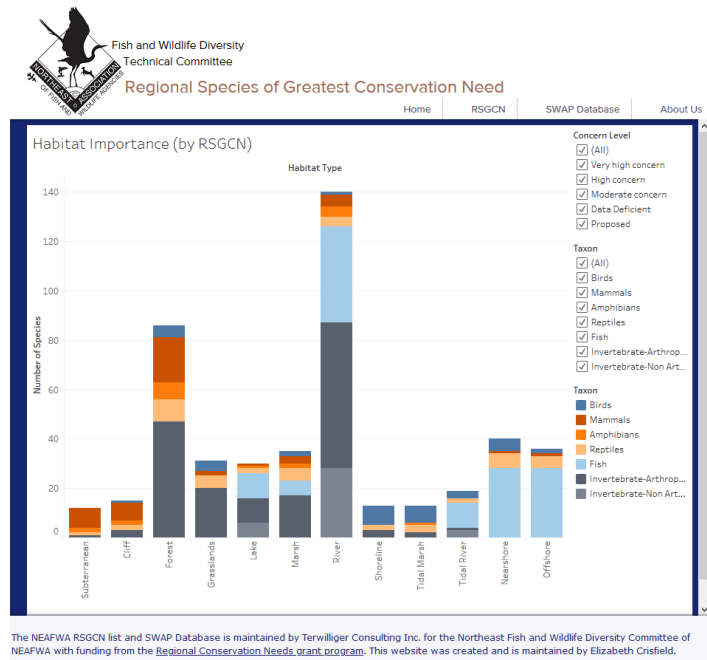


Technical Services Summary Update to NEFWDC October 2020

Summary: As part of the RCN 2.0 5-year Technical Services contract, TCI maintains and updates the RSGCN list and the NE SWAP Database. This year, TCI created a new database table of limiting factors by researching and entering detailed species and habitat information, and engaging taxa teams to confirm the limiting factors. This past summer, TCI finalized a report outlining these limiting factors or vulnerabilities by taxa groups and integrated them into the existing Northeast SWAP database. The database was updated, posted on the web to allow NEAFWA states and their partner to query these details. The updated database was sent to more than 300 existing and potential key users with instructions and documentation on its use. Presentations, training, and technical assistance continue to be provided to key conservation partners.

The objective of this year's effort was to identify key limiting factors impacting Northeast RSGCN. These factors (see full report on website) will help conservation planners across the region by:

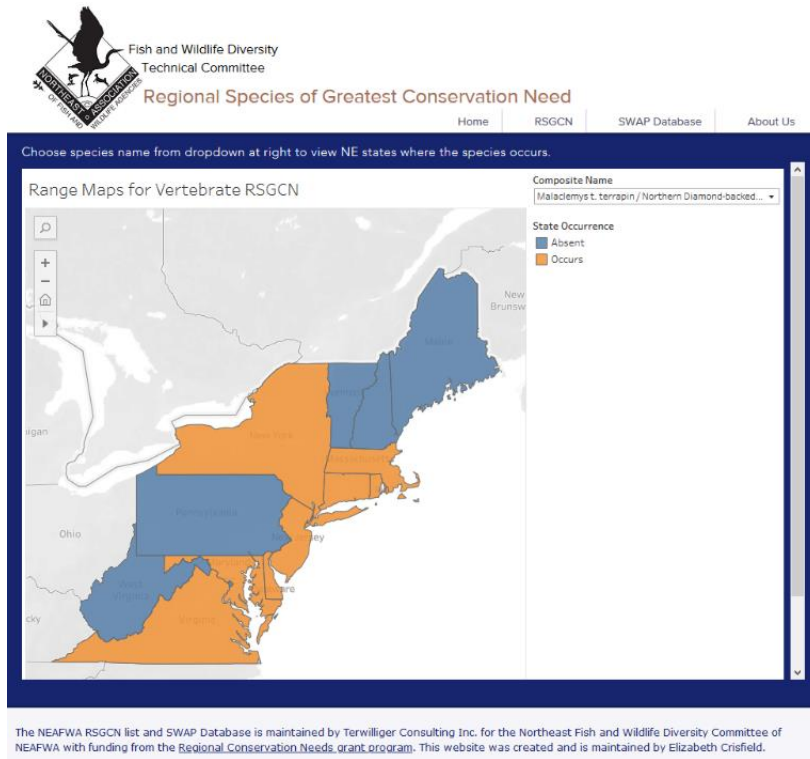
- specifying the most impactful habitat condition requirements that limit RSGCN species
- linking species with similar habitat needs across taxa groups and broader habitat macrogroups
- identifying species with vulnerabilities from disease, predation, toxicity and other threats
- revealing data gaps that may be responsible for species' declines



TCI has developed a preliminary website to deliver their technical services products and other key RCN tools. As part of the design process, they have provided a temporary website displaying the products described above (northeastwildlifediversity.org), including the RSGCN list which can be interactively filtered by state, taxon, or other fields and downloaded right from the website. The SWAP Database is currently an Access database, not yet funded to be made available through a browser. Therefore, TCI provides additional software for limited query tools on the website. Together, these tools constitute a “dashboard” allowing searches to quickly determine which species are priorities for users’ customized needs.

For example, users can now explore key habitats associated with taxonomic groups or RSGCN levels of conservation concern (using the checkboxes on the right to update the chart -see inset screenshot above).

Maps of RSGCN state occurrence are also available (shown below for Diamondback Terrapin). Additional tools are currently being explored and TCI welcomes input on graphics and analyses most useful for its diverse group of partners implementing conservation on the ground across the region.



As a result of this year's effort, NEFWDC taxa teams identified 47 additional species which may meet RSGCN criteria and will discuss these species as part of the 5-year comprehensive review completed in 2022. The NEFWDC is currently reviewing the newly confirmed research, monitoring, and management priorities for potential RCN funding. The updated database including this new information was recently posted on the NEAFWA website and is now available for use by state agency staff and their partners including USFWS at-risk species coordination.

This year's effort elucidated both emerging and persistent issues raised by taxa team experts shared by many states in the Northeast, and among multiple species and even taxonomic groups. Many of these factors need to be urgently addressed to prevent further declines in the region's most imperiled species. Examples include the exacerbating effects of climate change on existing threats, including changing temperatures, precipitation, shifting habitats and species ranges and phenology, as well as the more obvious sea level rise and storm intensity and frequency being experienced in the Northeast. Also, the reliance of many RSGCN taxa on invertebrates highlights the importance of expanding and partnering for invertebrate conservation (including pollinators, aquatic taxa and key habitats) to develop BMPs, survey and monitoring protocols to then apply on the ground for consistent, more effective regional conservation. Other taxa groups, such as crayfish and small mammals were found to be data deficient.

To complete this effort, TCI is currently crosswalking these limiting factors with the Conservation Measures Partnership Threat Classification System used in the Northeast Lexicon and 14 SWAPs to assist states in identifying the top threats and associated conservation actions to address them regionally. Compiling, coding and synthesizing this technical information supports NEFWDC representatives and taxa team experts in preparing for the upcoming comprehensive RSGCN review. It also informs state RSGCN selection and SWAP revisions over the next several years in the 14 NEAFWA jurisdictions.