Data and Map Changes for Endangered, Threatened, and Special Concern Turtle Species

Maine Department of Inland Fisheries and Wildlife
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Why has MIDFW made this change in how spatial data for Endangered, Threatened, and Special Concern turtle species is depicted?
Several of Maine's freshwater turtle species face a growing threat from illegal collection for the domestic and international pet trade. Poachers frequently utilize publicly available data to identify collection sites (e.g., wildlife agency program reports and maps, published research papers, and more). The Maine Department of Inland Fisheries and Wildlife (MDIFW) identified the need to reduce risk to populations of three frequently traded rare Maine turtle species by limiting the public availability of spatially explicit data for Blanding's turtles (State Endangered), spotted turtle (State Threatened), and wood turtle (State Special Concern). Instead, we now just show "turtle towns" to indicate the presence of these species at a broad scale only and to direct public data users to inquire with MDIFW for more specific information.

In making this change we seek to strike a balance where we can continue to share Endangered, Threatened and Special Concern (ETSC) turtle spatial data for Environmental Reviews and with conservation partners via Beginning with Habitat (BwH) for the benefit of turtle conservation, to reduce risk to Endangered, Threatened and Special Concern (ETSC) turtle populations from illegal collection, and simultaneously minimize the risk that any publicly available data can be used to identify ETSC turtle populations. We also want to avoid sharing ETSC turtle spatial data publicly in a way that provides poachers with meaningful intel by depicting occurrence polygons centered around occupied habitat (with or without labelling).

What data and species are affected?
MDIFW's "Endangered, Threatened, & Special Concern (ETSC)" data for Blanding's turtle, spotted turtle, and wood turtle.

How was this layer created?
The GIS process for identifying turtle town(s) consisted of selecting the town for each observation point and any adjacent towns that overlapped with the turtle's "smart" ER polygon. When multiple turtle observations shared the same "smart" ER polygon – they were all associated with the same "Turtle Town(s)" polygon. This resulted in 226 unique "Turtle Town(s)" polygons. Every ER-quality turtle observation is now linked to one of these 226 "Turtle Town(s)" polygons. In the PDF map layout used for Environmental Review "Turtle Town(s)" polygons are labeled as a "TURTLE CONSERVATION AREA", but it will not draw the "Turtle Town(s)" polygon (because in most cases the boundaries of the "Turtle Town(s)" polygon extend off the map and that makes it difficult to understand what you are looking at). The label is configured so it is offset from the center of the "Turtle Town(s)" polygon to prevent it from labeling right on top of the project location, which is always in the center of the map.

Where/how to get more information or to gain access to ETSC rare turtle polygons:
Please contact Derek Yorks (Derek.Yorks@maine.gov) with any questions related to rare turtles.
Note: MDIFW may be amenable to providing spatially explicit smart polygon data to vetted conservation partners and others on a case-by-case basis by way of a data sharing agreement. Please contact Amy McLaughlin with any requests for this restricted data. Please contact the MDIFW Environmental Review program (ifwenvironmentalreview@maine.gov) with project and other development-related inquiries.

Additional resources
A USFWS article covering the issue of illegal turtle trafficking in the US
https://www.fws.gov/story/joining-forces-combat-turtle-trafficking