

2024 T&E 5-year Review Meeting

February 21, 2024
KDWP Office – Emporia, KS
10:00 a.m.

Attendees: Jordan Hofmeier, Mark Shaw, James Whitney, Bill Jensen, Elmer Fink, Dave Haukos, Chris Berens, Krystal Beat (Christopher Rogers excused but voted electronically)

KDWP: Goals for meeting: Formulate final status recommendations to the Secretary for species with substantial petitions based on expert evaluations and committee review of existing information.

The committee reviewed and approved the meeting minutes from 12-18-2023.

KDWP provided a status update and summary of Public Informational Meetings – Most meetings went well, little public participation/comments. Recording of the Zoom meeting can be found on the KS Outdoors website.

Meeting Topics

Discuss Layher 1986 report, significance of 35-year window

Committee discussed Layher 1986 report that serves as basis for expert evaluation process during the 5-year review. The report includes reference to a 35-year window for determining if a species is extirpated from the state. It was noted that the 35-year window has been applied in expert evaluation forms beyond just determining extirpation (habitat, distribution, etc.). The question was posed if the committee could provide some historical perspective how or why this approach was used. World War II often served as a historical benchmark for when we started to have quality data on some species. Breeding Bird Survey and Christmas Bird Count standards may have been a factor in deciding on 35 years. The 35-year window may have been applied in the 80's without the intent of it being a rolling window. If 1950s were used as a static historical baseline rather than a shifting one for population, habitat, or distribution evaluations, several historical issues were brought to discussion including the USDA Soil Bank Program (1956) [in context of affecting species distributions/numbers], general lack of standardized sampling protocols, lack of quality historical distribution/abundance/habitat data for many species or regions, etc. As a result, many historical accounts were based largely on individual perspective or experience. However, 1950s are when there was an uptick in biological collections from universities and museums. There was a general desire for an extended time frame in evaluating overall species status, but the aforementioned constraints were acknowledged. Applicability and appropriateness of a single standard to all taxa was discussed, but there was general agreement within the group that there are benefits to having one standard for a regulatory process and for public participation. No immediate action was taken but KDWP agreed to evaluate this in the interim before the next 5-year review period. Other organizations or processes may provide a good starting point.

Discuss process for modifying temporary Designated Critical Habitat (DCH)

KDWP provided definitions of temporary DCH and DCH within a Recovery Plan and described how 2016 legislation required KDWP to formalize a Recovery Plan within 4 years of a species listing for KDWP to maintain regulatory authority over that species' DCH. Questions were posed: 1) what the committee's role has been historically in making temporary DCH decisions and 2) if the committee could provide additional background on the process of establishing or modifying temporary DCH. It was indicated that typically Ecological Services (ES) would contact species experts to inform DCH determinations. It was noted that data collected by KDWP-ES Biodiversity Survey crews would be beneficial in making DCH determinations. It was mentioned that regulatory Habitat Evaluations could also help inform DCH. Changes could be proposed to previous temporary critical habitat designations based on this updated information, and those changes could be brought before the committee. It was noted that this was more specific to temporary DCH, as DCH within a Recovery Plan follows a formal process that requires local committees and public comment periods. Discussion ended with KDWP expressing a general desire for a more standardized process for defining temporary DCH, and that KDWP would bring forward ideas in the future.

Review proposed modifications to temporary Designated Critical Habitat (Least Tern)

KDWP initiated discussion regarding temporary DCH of the Least Tern. Specifically, that temporary DCH had been established at Jeffrey Energy Center (+5 mile buffer) based on Least Terns nesting on the fly ash piles. Number of nests and nesting success was monitored from roughly 2007-2017, but there was no information related to survivorship of fledglings or whether birds (or their offspring) returned to nest at Jeffrey. General habitat quality of the ash piles is low – the surface is as hard as concrete and subject to extreme wind and high temperatures. EPA is requiring fly ash piles to be closed, which would require covering with topsoil and seeding of perennial vegetation. The committee was asked for input on the potential to remove this specific portion of temporary DCH for the Least Tern. Members familiar with the area indicated there was little suitable habitat within the 5-mile buffer and it was noted that the Kansas River was 6.5 miles from the fly ash piles. General discussion around if the fly ash piles might be acting as a “sink” for the species based on the pollutants the piles contain, and that there would likely be overall environmental benefit from capping the piles. Additional discussion revolved around ability of Least Terns to nest and re-nest opportunistically on open ground, reducing likelihood of significant impacts from closing fly ash piles. The group generally discussed principle of designating unnatural features as critical habitat. Following discussion, KDWP requested a vote on the matter. **Proposal: Remove Jeffrey Energy Center and 5 mile buffer from Temporary DCH for the Least Tern – Vote passed unanimously (6-0).**

KDWP provided the committee with updates and requested comments on recovery plans in the works:

- Cylindrical Papershell (incorporate recent data, establish local committee)
- Hornyhead/Redspot Chubs (committee comments)
- Ellipse (internal review, establish local committee)
- Flat Floater (surveys ongoing)
- Strecker's Chorus Frog (surveys ongoing)
- Plains Minnow (internal review)
- Butterfly/Flutedshell (internal review, establish local committee)

- “Conservation Plans”
 - Broad-headed Skink (potential)
 - Redbelly/Smooth Earth snakes
 - Longnose Snake
 - Northern Map Turtle (potential)

Committee has helped establish priority ranks for recovery plans in the past, may be a need to revisit this list. Recovery Plan review process typically starts immediately following each 5-year review process.

Expert Evaluation Reviews

Broad-headed skink

Evaluation score: 2.98; Consistent with SINC listing by score ranges

Summary of comments in Expert Evaluations:

- Uncertainty about population trends, similar to other reptiles; wider habitat association than previously thought; does not appear likely to become endangered in foreseeable future (Expert Evaluation Recommendation: SINC)
- Increased numbers from recent surveys; habitat is less limited than previously thought and maintainable through common management practices; habitat is limited through eastern parts of the state (Expert Evaluation Recommendation: SINC)
- Mature forest within Eastern KS is not common and threatened by invasive species; additional protected land with connectivity preferred prior to downlisting; downlisting would lower likelihood of expending funds for management; recovery plan in development that would formalize conservation targets (Expert Evaluation Recommendation: Threatened)

Discussion:

It was noted that the expert who recommended Threatened Status had numerical scores consistent with SINC status. One committee member expressed concern with the low number of expert evaluations. The group discussed the potential need for a committee member in the future with a background in herpetofauna that could help solicit experts.

Committee Vote for Broad-headed Skink status: 6 votes SINC, 1 vote Threatened

Northern Map Turtle

Evaluation score: 2.05; Consistent with un-listed status by score ranges

Summary of comments in Expert Evaluations:

- Increased observations due to changed survey methods, not necessarily due to changes in population; lack of historical perspective due to ineffective survey methods; indecisive between SINC or unlisted status (Expert Evaluation Recommendation: SINC)
- Noted validity of 2019 survey efforts (Expert Evaluation Recommendation: SINC)
- Supportive of recent survey methods for more accurate population representation (Expert Evaluation Recommendation: SINC)

- Concern of accuracy with Herp Atlas observation numbers; KS populations are likely isolated from neighboring states; All ages are documented (Expert Evaluation Recommendation: SINC)

Discussion:

- Group discussion regarding possibility of an 'unlisted' status recommendation vs. the petitioned SINC listing. The Committee has deviated from petitioned statuses on rare occasions when they felt there was considerable data supporting such a decision. Committee members noted the high quality of one evaluation that provided justification for answers, additional context, and noted uncertainty for each evaluation category.

Committee Vote for Northern Map Turtle Status: 6 votes SINC, 1 vote Unlisted

Shoal Chub

Evaluation score: 4.09; Consistent with SINC by score ranges

Summary of comments in Expert Evaluations:

- Species still absent through much of historical range; lack of demonstrated success in recovery efforts; populations may be susceptible to synergistic drought/fragmentation; concern with applying 35-year shifting baseline – example being reservoir construction completed in 60's/70's (Expert Evaluation Recommendation: Threatened)
- Various forms of fragmentation and drought threaten the species (Expert Evaluation Recommendation: Endangered)
- Noted need for benthic gear for Shoal Chub (Expert Evaluation Recommendation: SINC)
- Historical records in Arkansas River prior to Kaw Reservoir construction (35-year timeline concern); most broadly distributed and least threatened of *Macrhybopsis* (Expert Evaluation Recommendation: SINC)
- Populations cyclic range wide based on habitat availability; sensitive to environmental disturbance; climate change potential threat with increased water temperatures (Expert Evaluation Recommendation: SINC)
- Drought/fragmentation synergistic threats, already examples in the KS River Basin; Population assessment should be considered in context with streamflow data; Some recent surveys were targeting Shoal Chub vs. past community-based surveys; potential plans for recovery efforts are not vetted (Expert Evaluation Recommendation: Threatened)
- Two expert evaluators did not provide comments but recommended downlisting to SINC

Discussion:

The ranges of scores and subjective status recommendations for Shoal Chub were wider than previous two species discussed. It was surmised that perhaps this wide range could be attributed to the 35-year window, with some experts strictly adhering to the window resulting in a lower status recommendation (SINC), with others looking beyond 35 years and noting the habitat loss through reservoir construction – resulting in a higher status recommendation (Threatened/Endangered). It was noted that the numerical scores of the expert who recommended Endangered status were considerable outliers compared to the rest of the group. The committee discussed one evaluator's comments who recommended Threatened status in how it was unclear what expectations the evaluator had for requiring more scientific rigorous analysis prior to downlisting compared to what was brought forward in the petition. It was pointed out

that the evaluator desired more analysis on streamflow-population relationships. The committee discussed the synergistic impacts of fragmentation and drought on Shoal Chub, noting the short lifespan and generation cycle. One committee member asked how common are lowhead dam proposals in recent years. KDWP indicated that they are not common, but there are occasional news stories related to the desire for a recreational impoundment on the Kansas River at Topeka. The committee discussed multiple references to the *Machrybopsis aestivalis* genetic complex, and whether taxonomy/genetics for these species (including Shoal Chub) were settled. It was indicated that discussion is ongoing, but Kansas may not be affected by potential changes based on ranges of the species in the complex. It was noted that the story presented in the petition was like those of Northern Map Turtle and Broad-headed Skink (increased effort/improved methods increased detections of the species), but there might be reason to err on side of caution given cyclic nature of Shoal Chub populations due to lack of proven recovery methods. This point was followed with support that one difference between Shoal Chub and the other 2 species is there is a clearer picture of habitat loss for Shoal Chub following reservoir construction. KDWP noted increased opportunities for propagation/repatriation and conservation agreements. The committee asked if KDWP had propagated Shoal Chub yet. KDWP indicated not but have propagated species with similar life histories (Plains Minnow), and other entities have successfully propagated Shoal Chub, so some methods are established. The committee asked how overall DCH would be affected by a downlisting. KDWP indicated that all areas of current Shoal Chub DCH are encompassed by DCH of other listed species (Plains Minnow, Silver Chub, etc.). The committee asked how DCH interacts with water rights in Kansas. KDWP indicated that there is little interaction between DCH and water rights other than construction of infrastructure to withdraw water.

Committee Vote for Shoal Chub status: 4 votes SINC, 3 votes Threatened

**Will share meeting notes and expert evaluations with absent committee member (CR) and finalize committee recommendations once his votes are received.

Closing Topics

- Any committee members that may not be on the committee for the next review – Requested that committee members keep in mind the species expertise diversity and any possible replacement committee members. May be beneficial to have a committee member with a greater herp-specific background.
- KDWP will compile and distribute meeting notes and keep the committee updated on finalized vote totals once all votes are received.
- Following meeting, excused committee member was briefed on meeting and provided votes for status recommendations. Vote totals were updated to reflect this.