## WYNDD PROJECT REPORTS – <u>INVERTEBRATE ZOOLOGY</u>

Completed reports will be available at: http://www.uwyo.edu/wyndd/reports-and-publications/

## Completed between 1 June – 1 November 2019

Tronstad, L.M., O. Wilmot, D. Thornbrugh and S. Hotaling. 2019. Aquatic invertebrate monitoring at Agate Fossil Beds National Monument: 2016 annual report. Report prepared for the USDI National Park Service—Great Plains Network by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Wilmot, O.J., L.M. Tronstad, S. Siddons, M. Murphy and B. Fitzpatrick. 2019. Using eDNA to guide surveys for Plain Pocketbook and Giant Floater mussels in Wyoming. Report prepared for the Wyoming Game and Fish Department by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

## **In-progress as of 1 November 2019**

Handley, J. and L. Tronstad. 2019 *in preparation*. How does climate affect reproduction in Desert Yellowhead (*Yermo xanthocepahlus*)? Report prepared for USDI Bureau of Land Management-Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Handley, J. and L. Tronstad. 2019 *in preparation*. Investigating the status, pollen-limitation and pollinators of *Yermo xanthocephalus* (desert yellowhead) in central Wyoming. Report prepared for USDI Bureau of Land Management-Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Handley, J. and L. Tronstad. 2019 *in preparation*. Investigating the status, pollen-limitation and pollinators of *Penstemon absarokensis* (Absaroka Range beardtongue) in northwest Wyoming. Report prepared for USDI Bureau of Land Management-Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Handley, J. and L. Tronstad. 2019 *in preparation*. Investigating the status, pollen-limitation and pollinators of *Trifolium barnebyi* (Barneby's clover) in central Wyoming. Report prepared for USDI Bureau of Land Management-Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. 2019 *in preparation*. Life history of *Oreohelix* in the Snowy Mountains, Wyoming. Report prepared for the Wyoming Game and Fish Department by the Wyoming Natural Diversity Database-University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. 2019 *in preparation*. Investigating the distribution of *Zapada glacier* in Wyoming. Report prepared for the USDA Forest Service-Rocky Mountain Region (Region 2) by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. 2019 *in preparation*. The status and distribution of the Regal Fritillary (*Speyeria idalia*) in Wyoming. Report prepared for the Wyoming Governor's Office and the Wyoming Game and Fish Department by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. 2019 *in preparation*. Investigating the status and distribution of the aquatic beetle, Narrow-foot Hygrotus Diving Beetle (*Hygrotus diversipes*). Report prepared for the USDI Bureau of Land Management—Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. 2019 *in preparation*. Aquatic invertebrate monitoring at Agate Fossil Beds National Monument: annual report. Report prepared for the USDI National Park Service—Great Plains Network by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. 2019 *in preparation*. Statewide assessment of rare invertebrates in Wyoming. Report prepared for the Wyoming Governor's Office and the Wyoming Game and Fish Department by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. and M.D. Andersen. 2019 *in preparation*. Aquatic snails of the Bear and Powder River basins, Wyoming. Report prepared for the Wyoming Game and Fish Department by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. and T.M. Koel. 2019 *in preparation*. Nutrient cycling and plankton dynamics of Yellowstone Lake, Yellowstone National Park. Report prepared for the USDI National Park Service—Yellowstone National Park by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M. and T.M. Koel. 2019 *in preparation*. Investigating the food web dynamics in Yellowstone Lake 30 years after the invasion of lake trout. Report prepared for the USDI National Park Service—Yellowstone National Park by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M., C. Bell and M. Dillon. 2019 *in preparation*. Continuing investigations of the current status of the declining Western Bumble Bee, *Bombus occidentalis*, in Wyoming. Report prepared for the USDI Bureau of Land Management–Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M., G. Jones, M. Andersen and G. Beauvais. 2019 *in preparation*. Modeling and mapping the distribution of insect prey used by Greater Sage-Grouse during the early brood rearing period. Report prepared for the USDI Bureau of Land Management–Wyoming State Office by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Tronstad, L.M., S. Siddons and K. Gelwicks. 2019 *in preparation*. Using eDNA and visual surveys to estimate the distribution of California Floater mussels (*Anodonta californiensis*) in the Bear River drainage in Wyoming. Report prepared for the Wyoming Game and Fish Department by the Wyoming Natural Diversity Database – University of Wyoming, Laramie, Wyoming.

Tronstad, L.M., J.J. Giersch, S. Hotaling, A. Shah, L. Zeglin, R.J. Bixby, H.A. Woods and D.S. Finn. 2019 *in preparation*. Five years of alpine stream monitoring in the Teton Range: disentangling longer-term signals from year-to-year variability. Report prepared for the University of Wyoming National Park Service Research Station by the Wyoming Natural Diversity Database – University of Wyoming, Laramie, Wyoming.