

(3) One adults, two wild-hatched juveniles, and two headstarts were equipped with transmitters were tracked throughout the active season (Table 1).

Use of grant funds received from the Friends of Nachusa Grasslands:

D Mauger, T Anton, R King - trapping \$4950.00

Benefits to the work and goals of Nachusa Grasslands:

- Determination of the timing and location (habitat) of key Blanding's turtle life-history events (active season, nesting, hatching, overwintering)
- Collection of eggs, release of head-starts, assessment of Blanding's turtle head-start survival
- Contributions to regional and state-wide Blanding's Turtle management efforts

Application to management practices for restoration effectiveness and species of concern:

- This project has identified areas where encroachment by woody vegetation may reduce habitat quality for Blanding's turtles, areas where care should be exercised in the application of management practices to avoid negative impacts on Blanding's turtles, and areas adjacent to Nachusa Grasslands that are utilized by Blanding's turtles.
- This project has identified predation as a major risk factor to eggs, hatchlings, and head-started Blanding's turtles, and demonstrated the potential benefit of predator management for turtle conservation.

Presentations/posters:

Plains, Trains, and Automobiles: State-wide Analysis of Human-Caused Blanding's Turtle Mortality (poster) Friends of Nachusa Grasslands Science Symposium, April 2025

Manuscripts submitted to scientific journals:

King, R., Anchor, C., Anthonyamy, W.J., Denham, S., Dreslik, M., Dunham, N., Glowacki, G., Golba, C.K., Graser, W., Jablonski, C. Janzen, F., Kessler, E.J., Kuhns, A.R., Ludwig, D.R., McCabe, K., Phillips, C., Thompson, D., Towey, J.B. 2025. Archival data reveals human impacts on Blanding's turtle population persistence. *Journal for Nature Conservation* 87 (2025) 126966, <https://doi.org/10.1016/j.jnc.2025.126966>.

Anticipated follow-up research:

- R. King and collaborators continue to monitor head-start survival at sites in DuPage, Kane, Lake, and Lee County.
- Results of this project will be used to develop best practices for Blanding's turtle head-starting.

Table 1. 2024 Nachusa Grasslands Blanding's turtle trap captures and telemetry subjects.

ID	2024 Trap Captures	Transmitter Status	Last Encounter	Site	Age Class	Sex	Origin	Year of Release	Comments
ABV	25-Apr-24	none	25-Apr-24	Bivins	juvenile	male	headstart	2022	
1L8R	28-Apr-24	continued	18-Jun-24	Tellabs	adult	female	wild	na	transmitter failed
2L11R	28-Apr-24	new	16-Sep-24	Tellabs	juvenile	unknown	wild	na	tracking continued
AN	28-Apr-24	none	29-Apr-24	Bivins	juvenile	unknown	nest cage	2018	
AIJ	1-May-24	none	1-May-23	Bivins	juvenile	female	headstart	2022	
2L12R	1-May-24	new	17-Jul-24	Bluestem Bottoms	juvenile	unknown	wild	na	transmitter failed
AIN	1-May-24	new	9-Sep-24	Bluestem Bottoms	juvenile	female	headstart	2022	transmitter removed
ABJ	2-May-24	new	16-Sep-24	Bivins	juvenile	female	headstart	2022	transmitter removed
AIV	2-May-24	none	2-May-24	Bivins	juvenile	male	headstart	2022	