

## Dabbler Tracking Report

### mid-November, 2021

In 2019, Delta Waterfowl initiated a study of migration and wintering ground habits of dabbling ducks in the Mississippi Flyway. We partnered with Dr. Douglas Osborne of the University of Arkansas, and master's degree students Starla Phelps and Daniel Odin, to put radios on mallards, wigeon and green-winged teal during the winters of 2019-2020, and again in 2020-2021 in east-central Arkansas. In September 2021, 60 additional radios were affixed to mallards and green-winged teal in South Dakota. The shift to marking in the north is an effort to learn more about the choices ducks make in the fall regarding migration routes, timing, and settling at wintering areas. Following are recently recorded duck movements, but note that not all ducks in the study will transmit location data during each reporting period.

Fourteen mallards marked in Arkansas were still transmitting in May 2021. Six of them are still regularly transmitting data this fall. Their spring and summer movements are shown on Map 1. All six mallards exhibited tight clusters of locations that we interpret as nesting sites, and then locations where the ducks molted their wing feathers. Three of them spent the summer in Manitoba, two in Saskatchewan, and one in North Dakota. Map 1 also shows that the northernmost duck has moved the farthest south as of mid-November, while one bird that summered in Manitoba still had not started southward migration. So far, none of those mallards are as far south as the area in Arkansas in which they were originally marked.

In late summer, Delta ordered 30 mallard and 30 greenwing transmitters for deployment with partners in northeast South Dakota (special thanks to Brett Leach and Don Soderlund for targeting greenwings and sharing mallard banding). We installed all 60 radios in three days.

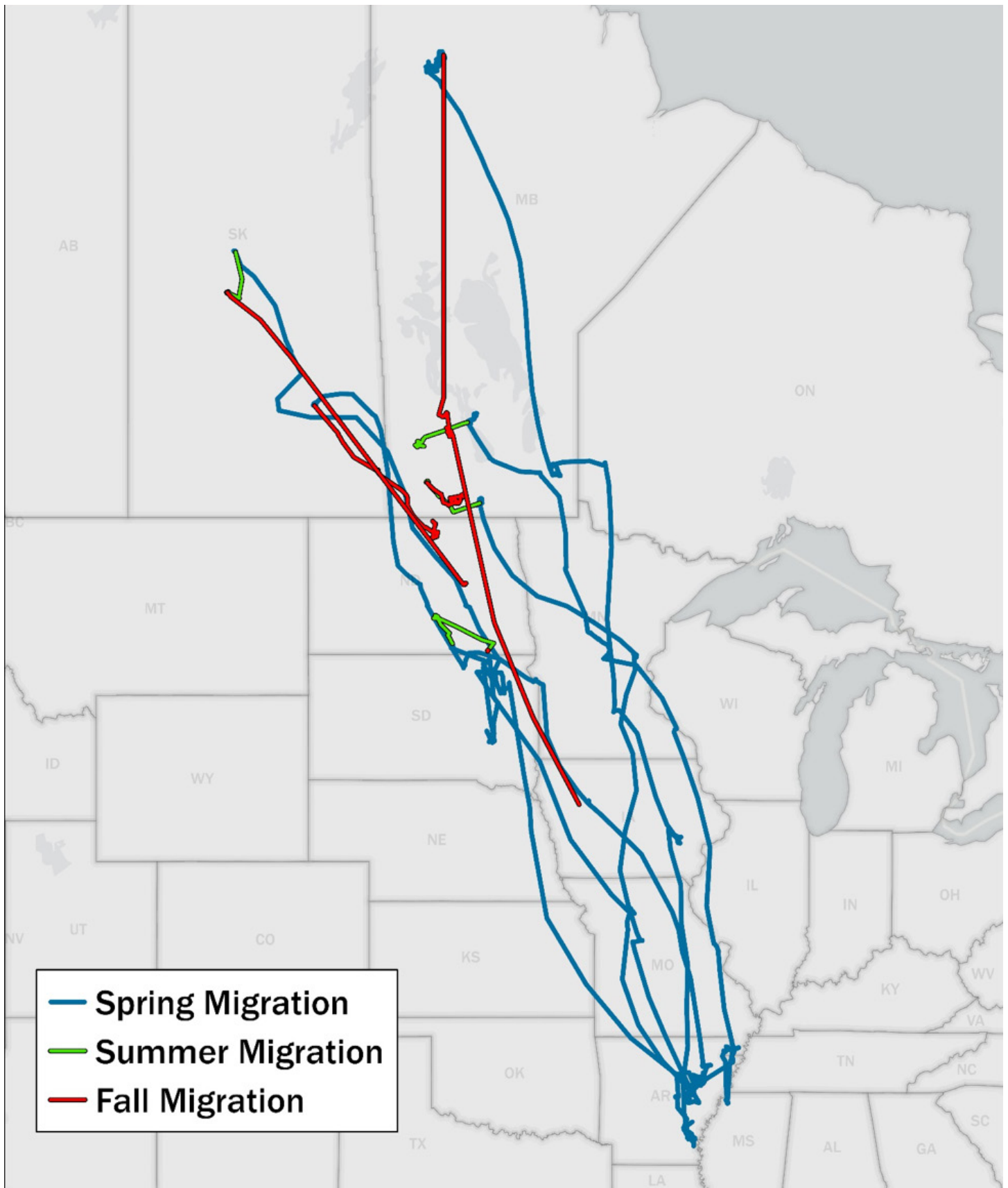
We are getting location data from all 30 mallards, but they have been slow in departing the marking region. Only four having migrated, as shown on Map 2. One male, left the area at 6:30 p.m. on Oct. 31, flew for 11 hours and at least 850 miles before landing just north of Lansing, Michigan. Three other mallards moved ahead of recent storms and are currently in Iowa, Nebraska and Missouri.

Map 3 shows that the green-winged teal, as expected, began migrating south earlier than the mallards. Fifteen of the teal have left the banding region. Three are already in Arkansas. This is exciting, because we can learn how they move around before settling on an area and how they respond to hunting pressure once seasons open. The other teal migrants are spread from Tennessee, Illinois, South Dakota, Missouri, Kansas and Louisiana.

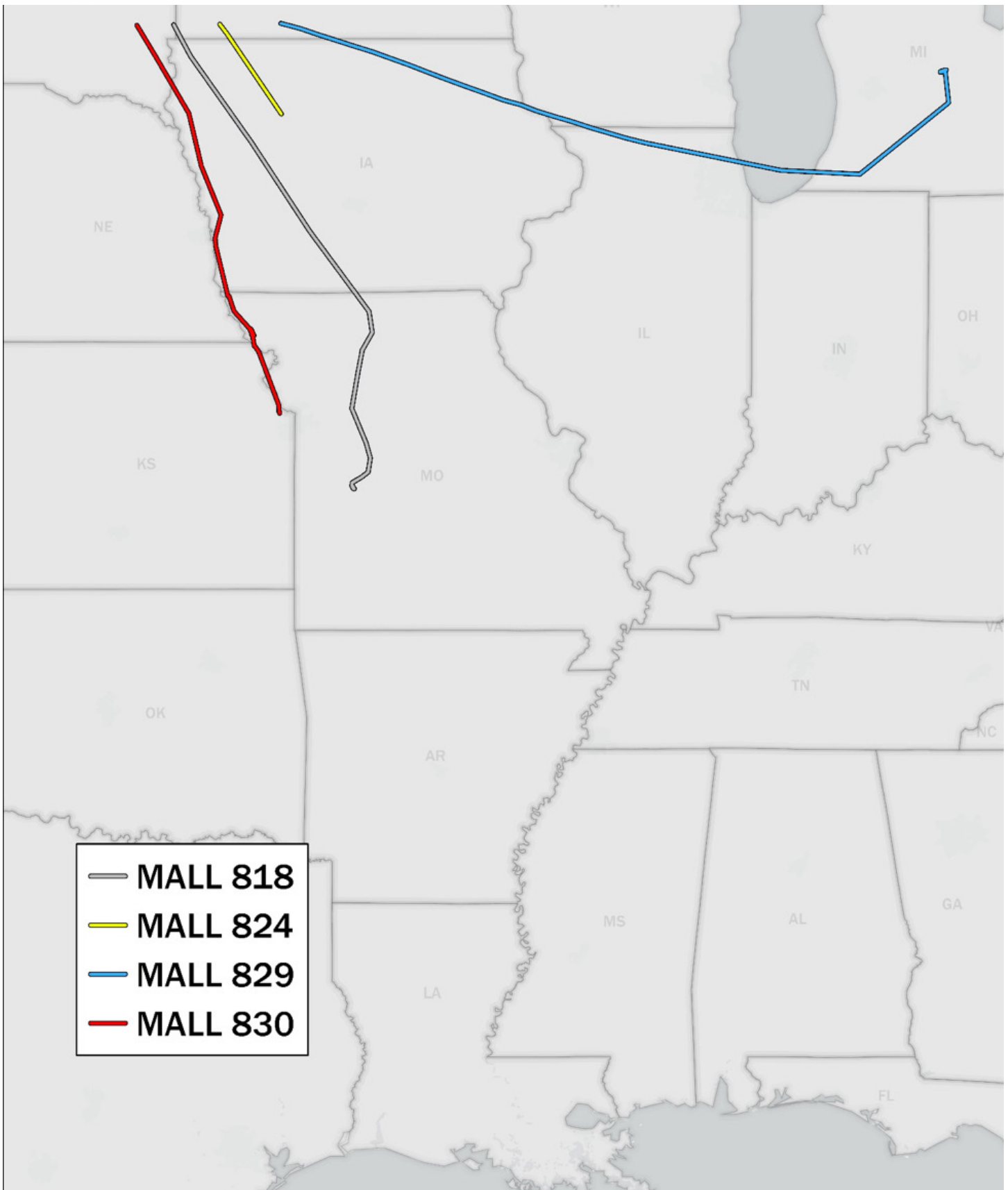
Two teal made notable movements. The first, a male, departed South Dakota on Sept. 17 and flew six hours and 300 miles to Nebraska. He stayed for there a week, then flew back to South Dakota to within 80 miles of his capture site. The most impressive movement was by a male that after staying at the capture site for nine weeks, departed on Nov. 12 at sunrise. The teal covered 1,100 miles in 22 hours (that's a 50 mph average) before landing near Marksville, Louisiana, before sunrise on Nov. 13. This duck climbed to as high as 5,000 feet during the migration, with the average altitude of 3,000 feet.



**Map 1. Migration paths for six mallards marked in winter of 2020-2021, showing spring migrations, summer nest, molt locations and initial fall 2021 migrations.**



**Map 2. Beginning migration paths for four of 30 mallards marked in September 2021.**



Map 3. Beginning migration paths for half of the green-winged teal marked in September 2021.

