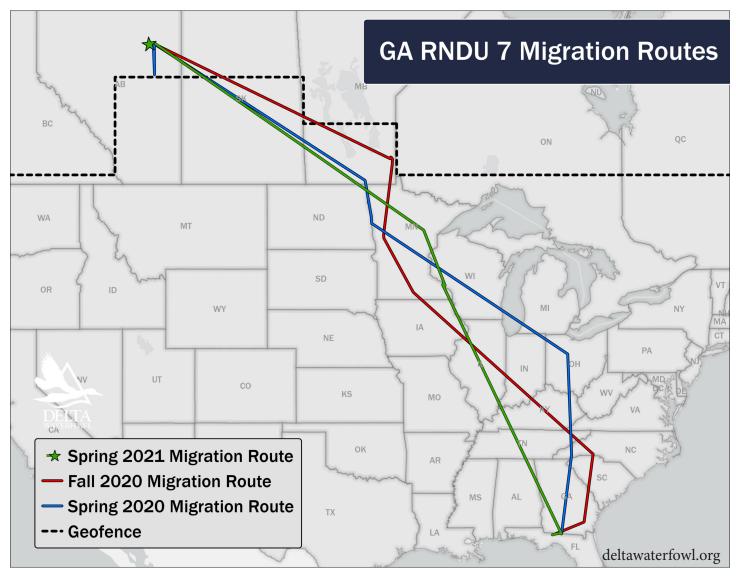


Ring-necked Duck Project

Early June Report

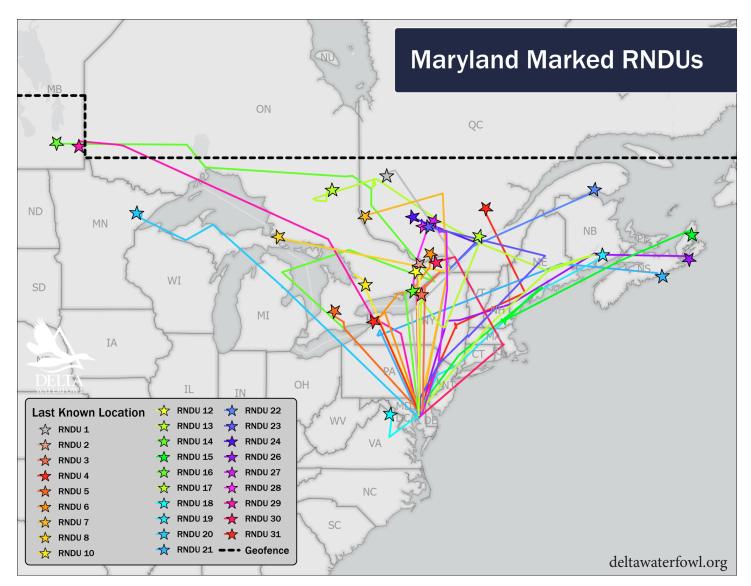
Delta Waterfowl began fitting ring-necked ducks with surgically implanted radios in the Atlantic Flyway in 2018. One goal of this research is to determine where Atlantic Flyway wintering ring-necked ducks are when the USFWS breeding waterfowl survey is conducted in May. Delta has been primarily interested in helping inform whether the eastern waterfowl survey was including all of the Atlantic Flyway wintering ring-necks, or if some western breeding birds were missed. Birds were marked in Florida and Georgia in 2018; Florida, Georgia and South Carolina in 2019; Florida, Georgia, South Carolina and Virginia in 2020; and Maryland in 2021.



Spring movements from remaining 2020 marked Ringnecks

The radios use cell phone towers to send location data. Some areas of North America have good cell coverage, while other areas do not. Poor coverage areas become more common as you move north and enter the boreal forest across central Canada. To save battery power, we program the radios to not attempt to send data once the ducks reach these poor cell coverage areas. As a result, not all ducks in the study will transmit data during each reporting period.

This is the fourth and final report in spring 2021 summarizing movements of ring-necked ducks Delta has radioed. All of the transmitting ringnecks have reached the boreal breeding areas these ducks prefer. Most of the ducks are in areas with poor cell phone coverage, so there has not been a lot of data since the previous report.



Spring movements of spring 2021 Maryland marked Ringnecks

However, one female ringneck implanted in 2020 has provided updated data since the last report. The duck is actually about 5 miles from the pond in central Alberta where we believe she nested during the 2020 breeding season. The behavior of returning to the same area is called "philopatry."

Ducks implanted in February 2021 in Maryland are settling at more eastern points than any of our prior study subjects. But that isn't too surprising, as Maryland is the farthest north we have marked ringnecks during this study. Five of the 2021 ducks are far east, in Nova Scotia and New Brunswick. The majority of the Maryland

wintering ringnecks have settled in Quebec and Ontario. Two of the ducks went as far west as Manitoba, with one in Minnesota.

It is likely that many of these ringnecks have moved from the points provided on these maps. The black dotted line on both maps shows the line, if crossed, which signals the radios to not transmit locations (known as a Geofence). We anticipate ducks will move south of this line in late August. Even though they are not transmitting data, the radios are still collecting locations. This fall, we'll provide an update of the locations collected over the summer after the ducks return to areas with good cell coverage and dump the data.