



PINTAIL ACTION GROUP NEWSLETTER

May 16, 2005

SPRING HABITAT CONDITIONS

- Wetlands and uplands in the **North Central U.S.** are generally in poor-to-fair shape although pockets of good-to-excellent habitat remain in northern North Dakota, northwestern Minnesota, and northern Iowa.
- Habitat conditions are rated very good-to-excellent in southern **Manitoba** with the exception of the extreme southwest corner of the province where conditions are good. Large numbers of pintail pairs have been observed south of Brandon this year.
- Conditions are generally good-to-fair in the Saskatchewan prairies with pockets of habitat in good condition. Habitat conditions in the parklands, including the Alan Hills, are good this spring.
- Habitat conditions are good-to-very good in central and northern **Alberta** and are the best they have been in years in this region. Southern areas are rated fair-to-poor and will be completely dependent on rainfall to improve conditions.
- Conditions in **Alaska** are rated good overall.

PINTAIL RESEARCH ON THE CANADIAN PRAIRIES

This spring marks the beginning of a 3-year pintail study being conducted by Ducks Unlimited Canada (DUC). This research is the adaptive management phase of DUC's pintail conservation strategy, and will assess the efficacy of habitat interventions (i.e. winter cereals, tame pasture and hayland) under differing landscape scenarios (landscapes ranging from crop-dominated to grass-dominated). This study will quantify influences of habitat type and landscape composition on both habitat selection and nest survival. Results will help define conservation actions most helpful in improving pintail nest survival.

To facilitate the evaluation of winter cereals, this year's study sites were selected last summer, and local landowners were contracted to grow winter cereals. In addition to growing winter cereals, the landowners also agreed to allow nest searching of the winter cereal fields and some of their spring seeded fields as well. Last summer was unusually cold and wet, which delayed harvest of many crops and presented challenges in seeding winter wheat prior to the recommended September 15 date. However, 9 quarter sections (1255 acres) spread over 4 study sites were planted in the fall of 2004.



The 6 research sites are located in the Missouri Coteau approximately 100 km SW of Regina, Saskatchewan. Although winter snowfall was slightly below average for this area, the wetlands went into the winter with reasonable water. This spring, most of the sites have good wetland conditions and pintail pair densities range from 6 – 8 pairs/sq mile. Nest searching began in the last week of April, and several pintail nests have been found in both native prairie and crop stubble.

An update on this research will be presented at the Pintail Action Group meeting being held this fall in conjunction with the Wildlife Society conference. For further information contact [Karla Guyn](#) or [Jim Devries](#).

RELATIONSHIP OF NORTHERN PINTAILS IN THE ATLANTIC FLYWAY TO THE CONTINENTAL POPULATION: A PRELIMINARY ASSESSMENT

The pintail has long been regarded as a traditional bird of choice in the hunter bag in eastern North America. This is especially true in the central and southern portions of the Atlantic Flyway, where ~50,000 birds are located during the fall and winter harvest period. Very little is known about this segment of the population; less than 4% of all pintails banded in Canada, and <8% of all pintails banded in the U.S. between 1966-1999 were harvested in the Atlantic Flyway. In February 2003, ten pintail females were marked with backpack harnessed satellite-tracked radio transmitters in South Carolina as a preliminary test of this technology and to identify breeding area affiliations, time of movements, and important spring and fall staging and/or stopover areas used during migration. The 2003 season was successful and an additional 41 female pintails were marked in spring

2004 at wintering locations in New Jersey (6), Maryland (4), Virginia (3), North Carolina (15), South Carolina (10), and Florida (3). Initial results show a spring migration corridor east of Lake Ontario to the southern James Bay region of Ontario with staging areas in Delaware, the lake plains area of central New York, and the Ottawa River valley region of Ontario/Quebec. Another, possibly more diffuse pathway, occurs south of the Great Lakes toward the Dakotas with staging in Ohio and Indiana. In 2005 we marked 18 hens in NJ(4), VA(2) and NC(12). Following completion of this year's monitoring of movements we plan to focus on defining temporal patterns of movement and habitat use. The project is expected to be complete in August 2006. [Richard Malecki](#)

THE BIAS OF THE MAY SURVEY IN DETECTING PINTAILS

Mike Miller is continuing an analysis of satellite tracking data in order to determine how migration pathways and areas settled by platform transmitter terminal (PTT)-tagged adult female pintails (years 2000-2003) compare with May survey data. Preliminary work shows that 25-47% of tagged hens are missed annually. Zero-15% of the hens did not use any of the survey strata, and others used strata only at times when they were not surveyed. The percentage of tagged hens that were missed was highest for California birds migrating over western pathways to Alaska; the group with the lowest percentage of missed hens use the mid-continent route, where survey strata are contiguous, large, and encompass most waterfowl habitats. Miller has given

two presentations on his material (TWS Conference in Bismarck, ND, and Pacific Flyway Symposium in Newport, OR). There has been criticism of the method used to determine whether tagged hens are missed, and the analysis has been complicated in Alaska by missing records that have led to uncertainty over stratum boundaries. Future analysis will concentrate on solving the latter issue, and will address the former by presenting results from a range of methods used to determine the number of birds missed. The power of this data set is not in the estimation of the percentage of pintails that might be missed, as previous studies have demonstrated, but in showing where pintails are when they are missed, and determining why. [Michael Miller](#)

MAY SURVEY BIAS & CONTINENTAL PINTAIL DYNAMICS

Mike Runge (USGS) and Scott Boomer (USFWS) recently issued a preliminary report on continental pintail population dynamics. This report updates many of the survival and recruitment analyses that Sue Sheaffer published in the late 1990s. In addition, it explores the evidence for "overflight bias" in the May survey and suggests an empirical correction for this bias. Finally, Mike and Scott point to evidence in continental data sets for a strong decline in pintail

productivity beginning in the mid-1970s, and explore the implications of this shift for harvest potential. The preliminary report and associated data sets can be found at <http://migratorybirds.fws.gov/mgmt/AHM/special-topics.htm>. A final report on this work will be available by early summer 2005. Mike and Scott are very interested in feedback on this work, particularly regarding the overflight correction. [Mike Runge](#)

DEMOGRAPHIC MODEL FOR PINTAILS

Bob Clark (CWS), Mike Runge (USGS), Paul Flint (USGS), Jenn Arnold (Auburn Univ.), and Ken Richkus (USFWS) have continued to refine the demographic analyses they presented at the 2004 TWS Conference. Bob and Mike met at Patuxent in April 2005 to outline and begin drafting a paper. This work focuses on (1) compiling estimates of life-history parameters, (2) integrating these using a stage-

structured model for pintail dynamics, (3) reconciling the parameter estimates and derived growth rates with observed population growth rates, (4) conducting a variance decomposition analysis to identify what vital rates are driving variation in growth rate, and (5) using all of the preceding to explore alternative mechanisms for the observed pintail decline. Stay tuned. [Mike Runge](#)

CURRENT AND UPCOMING PUBLICATIONS

Upcoming publications:

Fleskes, J. P., D. S. Gilmer, and R. L. Jarvis. In Press. *Pintail distribution and selection of marsh types at Mendota Wildlife Area during fall and winter*. California Fish and Game 91(4):000-000.

Recent publications:

Hebert, C.E. and L.I. Wassenaar. 2005. *Stable isotopes provide evidence for poor northern pintail production on the Canadian prairies*. Journal of Wildlife Management 69(1):101-109.

Fleskes, J. P., and D. S. Battaglia. 2004. *Northern pintail habitat use and waterfowl abundance during spring migration in southern Oregon-Northeast California (SONEC). Final Report*. U.S. Geological Survey, Dixon, California. 58pp.

Now available as a PDF at:

<http://www.werc.usgs.gov/dixon/pdfs/aallSONECfinalrpt.pdf>

ANNOUNCEMENTS

- The next PAG meeting will be held in Madison Wisconsin in conjunction with the Wildlife Society Conference. The meeting will be held on September 25, 2005 from 8:30 A.M. to 5:00 P.M. in the Madison Concourse Hotel.

- Rita Saunders has been creating a draft PAG web site that is near completion. Please e-mail your suggestions for the web site to [Karla Guyn](#) or [Joe Fleskes](#).

