

PINTAIL ACTION GROUP

NEWSLETTER May 30, 2006

PINTAILS TARGETED FOR AVIAN INFLUENZA DETECTION SAMPLING SPRING HABITAT CONDITIONS

Northern pintails are listed as a priority duck species and the primary dabbling duck targeted for live wild bird sampling in the Pacific Flyway's "***Surveillance For Early Detection Of Highly Pathogenic Avian Influenza H5N1 In Wild Migratory Birds: A Strategy For The Pacific Flyway***".

http://pacificflyway.gov/Documents/AIS_plan.pdf Sampling is slated to begin this spring, with pintails to be captured, swabbed, and banded in a variety of Alaska areas.

The PAG is encouraging banders in Alaska and other regions to, where logistically feasible, extend the duration of their banding operations or take other steps necessary to band as many pintails as possible at each of their respective study sites. We believe this represents a unique opportunity to make progress on the long-term goal to increase the number of pintails banded to enhance estimation of annual survival and harvest rates, and refine our understanding of linkages between summer and wintering populations. These data will become increasingly important as we move towards Adaptive Harvest Management models for Northern Pintails. Current sample goals, while considered adequate for a virus detection study, are likely

inadequate for band recovery analyses. Thus, while we acknowledge the funding and logistical constraints inherent in Alaskan field operations, and sincerely hope that the H5N1 strain of avian influenza does not cross from Asia to North America, we believe there is a unique opportunity to expand our knowledge of pintail populations and assist managers with obtaining long-term population goals.

The primary rationale for targeting pintails for Avian Influenza sampling is their potential interaction with Asian waterfowl,

Condensed from: Miller, M.R., J. Y. Takekawa, J.P. Fleskes, D.L. Orthmeyer, M. L. Casazza, and W. M. Perry. 2005. Spring migration of northern pintails from California's Central Valley wintering area tracked with satellite telemetry: routes, timing, and destinations. *Can. J. Zool.* 83: 1314-1332.

their wide distribution, and their importance in the Flyway.

- Conditions vary in **North Central U.S.** North Dakota, northern Iowa, and much of Minnesota are in good shape with many seasonal wetlands holding water but much of South Dakota is fairly dry.

- Melt waters from heavier than anticipated March snowfall has resulted in good-to-fair conditions in much of southeastern **Alberta**. Unlike last spring, conditions in much of northern Alberta are rated fair or fair-to-poor.

- Conditions are good-to-fair in **Saskatchewan** with some central regions very wet. Little runoff occurred in some southern prairie areas but late-April rains have helped.

- Habitat is once again good-to-excellent throughout

Manitoba, with wetlands in the southwest in especially great shape. **Ontario** conditions are also very good.

- Coastal **British Columbia** conditions are very good, with southern regions good-to-fair but other regions fair-to-poor.

- Spring in **Alaska** is arriving about 2 weeks late with many habitats still frozen. Western ponds should get recharged once deep snow melts. Interior conditions are expected to be about average.

May 26, 2006 Page 2

PINTAIL RESEARCH CONTINUES ON THE CANADIAN PRAIRIES

In 2005, Ducks Unlimited Canada (DUC) began a 3-year research effort aimed at examining pintail nesting ecology in the core of its PPR breeding range. The focus of the research is to gain understanding of pintail nest site selection and nesting survival in landscapes ranging from cropland to grassland-dominated. Embedded in the study design is an adaptive management component focused on testing the response of pintails to habitat interventions promoted under DUC's Pintail Initiative (i.e., winter cereals, tame pasture, hayland). In 2005, 6-16 mi² study sites were examined in the Missouri Coteau region of Saskatchewan about 100km SW of Regina. Approximately 1255 acres of winter cereals were planted in 2004 in cooperation with DUC on 4 of the 6 sites to facilitate evaluation of this crop type. Four complete nest searches were conducted on ~60 quarter sections of land. Habitats examined included native and tame grass pastures, idle tame grass, haylands, winter cereal crops, spring-seeded crops, and summerfallow. Among study sites, pintail pair densities ranged from 3 to 10 pairs/mi². A total of 129 pintail nests were found and pintails exhibited the widest range of nest habitat use among the most common dabbling duck species found. Pintails were especially prevalent in all cropland types. Pintail nest survival ranged from a low of 8.7 in spring-seeded cropland (95% CI: 3.5-20.9) to a high of 38.2 in fallseeded

crops (95% CI: 24.7-58.5) and averaged ~18% (95% CI: 12-26%) across all sites and habitats. The relative use of cropland habitat for nesting by pintails in this study coupled with low nest survival in springseeded croplands underscores the danger of this land use to pintails and the benefit of fall-seeded crops. However, while higher nest mortality in spring-seeded croplands was expected to be due to machinery, our data indicate that only about 10% of the nest losses were attributable to the seeding operation. Most nest losses in spring-seeded cropland were due to predation. Further analysis of landscape composition effects on habitat selection will be conducted at the conclusion of the study.

Study sites this year are located in the Allan Hills region of Saskatchewan southeast of Saskatoon. Approximately 1115 acres of winter wheat were planted on 4 of the 6 sites in the fall of 2005 and will be examined this year in addition to other habitats. Initial pair counts indicate pintail densities on most sites are near 10 pairs/mi² and nest searching is currently underway. In July of this year, we will select study sites for 2007 and contract seeding of winter wheat in 4 of those sites this fall. An update on this research will be presented at the PAG meeting being held this August in conjunction with the 4th North American Duck Symposium. For further information contact [Jim Devries](#) or [Karla Guyn](#).

SATELLITE TRACKING OF NORTHERN PINTAILS IN THE ATLANTIC FLYWAY

The relationship of northern pintails in the Atlantic Flyway relative to the continental population is being studied using satellite transmitters. During the past 3 winters, a total of 69 backpack harness satellite transmitters have been attached to female pintails wintering in Atlantic Flyway states: North Carolina (27), South Carolina (20), New Jersey (10), Maryland (4), Virginia (5), and Florida (3). Analysis to determine spatial patterns of movements, chronology of spring and fall movements, and identify important habitats is now starting. A Final Report is planned for completion later this summer. Results of this work will provide an interesting comparison with similar data from satellite tracking of pintails in other flyways. Contact [Richard Malecki](#) for more information.

May 26, 2006

• **Pintail Band-Recovery Data Assessment:**

Mindy Rice (Texas Tech), Dave Haukos (USFWS), and Jim Dubovsky (USFWS) have begun a comprehensive analysis of 1970-present banding and recovery data. Objectives are to (1) update and estimate annual survival and recovery rates under a variety of environmental and geographic scales, (2) evaluate survival and recovery rates under varying historical harvest regulations, and (3) develop recommendations for an operational pintail banding program, including pre- and post-season sample sizes for the Central and Pacific Flyways. These analyses will contribute to ongoing development of adaptive harvest models for pintails. Preliminary results will be presented at the PAG meeting in Bismarck with completion slated for summer 2007.

• **Pintails Banded in Saskatchewan:** A pilot effort was conducted in 2005 to band pintails in Saskatchewan. Objectives of the work were to identify pintail banding sites, test capture methods, and guide development of a pintail banding program. Contact Dale Caswell or see the report on the PAG website <http://www.siu.edu/~wildlife/PAG/Index.asp>

• **Pintails Banded Post-Season in California:**

In 2006, Calif. Dept. of Fish and Game contracted with the Calif. Waterfowl Association to capture and band pintails to determine the cost and feasibility of a possible post-season banding program. Using rocket nets loaned by USGS, 500 pintails in the Central Valley and 714 in Klamath Basin were banded; CDFG swabbed about 200 for Avian Influenza. Contact Dan Yparraguirre or Dan Loughman for additional info.

PINTAIL BANDING NEWS

Page 3

RECENT AND UPCOMING PUBLICATIONS

Recent publications:

Miller, M.R., J. Y. Takekawa, J.P. Fleskes, D.L. Orthmeyer, M. L. Casazza, and W. M. Perry. 2005. *Spring migration of northern pintails from California's Central Valley wintering area tracked with satellite telemetry: routes, timing, and destinations*. Can. J. Zool. 83: 1314-1332.

Miller, M.R., J. Y. Takekawa, J.P. Fleskes, D.L. Orthmeyer, M. L. Casazza, D. A. Haukos, and W. M. Perry. 2005. *Flight speeds of northern pintails during migration determined using satellite telemetry*. Wilson Bull. 117:364-374.

Fleskes, J. P., J. L. Yee, M. L. Casazza, M. R. Miller, J. Y. Takekawa, and D. L. Orthmeyer. 2005. Waterfowl distribution,

movements, and habitat use relative to recent habitat changes in the Central Valley of California. Final Report. USGS-Western Ecological Research Center, Dixon Field Station, Dixon, CA. <http://www.werc.usgs.gov/dixon/pdfs/AllCombinedFinalRptOCT05-allpgnuB.pdf>

ANNOUNCEMENTS

- The annual PAG meeting will be 8:30 am-5pm, Tuesday August 22, 2006 in Bismarck, North Dakota in conjunction with the 4th North American Duck Symposium (www.4nads.com).
- A Northern Pintail Workshop: “**Sacramento Revisited: An Update on Progress Toward Northern Pintail Recover**” organized by PAG will be held 6:30-9:30 pm on Friday August 25, 2006 in Bismarck, North Dakota in conjunction with NADS.
- For updates watch the NADS or PAG website <http://www.siu.edu/~wildlife/PAG/Index.asp>
- Contact [Joe Fleskes](#) or [Jim Devries](#) with comments or information for future newsletters.

Nicolai, C. A., P. L. Flint, and M. L. Wege. 2005. *Annual survival and site fidelity of northern pintails banded on the Yukon-Kuskokwim Delta, Alaska*. J. Wildl. Manage. 69:1202-1210.

Hanson B. A., D. E. Swayne, D. A. Senne, D. S. Lobpries, J. Hurst, and D. E. Stallknecht. 2005. *Avian influenza viruses and paramyxoviruses in wintering and resident ducks in Texas*. J. Wildl. Dis. 41:624-628.

McMaster, D. G., J. H. Devries, and S. K. Davis. 2005. *Grassland birds nesting in haylands of southern Saskatchewan: Landscape influences and conservations priorities*. J. Wildl. Manage. 69:101-109.

Upcoming publications:

Haukos, D.A., M.R. Miller, D.L. Orthmeyer, J. Y. Takekawa, J. P. Fleskes, M. L. Casazza, W. M. Perry and J. A. Moon. In Press. *Spring migration of northern pintails from Texas and New Mexico USA*. Waterbirds 00:000-000.