

Utah Trumpeter Swan Project - Update #1 December 3, 1996

July and August were very busy months for the Utah Swan Project. Over 6000 core samples were collected from the Bear River Refuge (BRMBR) and the Bear River Club (BRC). These samples are being analyzed to determine the distribution, abundance, and size of sago pondweed tubers in the substrates where swans forage. In October infrared aerial photos were taken of BRMBR and BRC to determine the distribution of vegetation in the ponds. In addition, 4 large (45'X90') enclosures were constructed on the BRC. The enclosures will aid in determining the success of "soft-release" techniques and also to investigate foraging behavior and interspecies interactions (detailed in project proposal).

Mild weather greatly slowed the November trapping efforts at Harriman State Park (HSP). Trumpeter swans remained dispersed throughout the Tri-State area and relatively few birds moved into HSP during the dark phase of the moon. The initial goal was to capture 10 hatching year (HY) tundra swans (WHSW) and 20 HY trumpeter swans (TRSW) for translocation to Utah. These birds were to be outfitted with neck collars (white with black letters) and radio transmitters, then released at Bear River Migratory Bird Refuge (BRMBR) during the swan hunting season (Oct4 -Dec2). One objective of this initial release was to determine if mortality of translocated TRSW differed from that of translocated WHSW.

Unfortunately, HY birds of either species proved difficult to capture. Few HY swans moved into HSP during the trapping period (only 21 were counted on 12 miles of river). An early freeze and the onset of the hunting season prevented capture of WHSW from Montana. Nonetheless 2 HY WHSW were captured at HSP on 11-6-96. An additional 14 adult (AHY) and 1 HY TRSW were captured at HSP and transported to the BRMBR on 11-15-96. These birds were outfitted with white collars and transmitters. Transmitters attached to the neck collar were used on some birds and feather mount (attached with glue on lower back) transmitters were used on others. Six of these birds were released along the shore of unit 1 near a large concentration of WHSW. The birds initially flew a short distance and then swam directly towards the distant flocks of WHSW. The other 9 TRSW were put into enclosures (3-4 birds per enclosure). These birds were observed for 3 days and released after dark on 11-18-96. They flew out of the enclosures into a group of nearby WHSW.

The likelihood of capturing a sample of WHSW from Montana or Idaho was slim. Therefore, on 11-7-96, three WHSW (1 HY and 2 crippled AHY) were captured on unit 4 of BRMBR. The HY bird was collared and all 3 were placed into an enclosure. An additional 3 WHSW (2HY and 1 crippled AHY) were captured on 11-14-96 on unit 4. The 2 HY birds were collared and all 3 birds were put into the enclosure. These birds were released 11-18-96 along with the TRSW held in the enclosures. Surveys were conducted on unit 4 each morning following night-lighting efforts. Waterfowl were abundant and well distributed and no effect of hazing from the previous night was apparent.

On 11-18-96, five more TRSW (4 HY, 1 AHY) were captured at HSP. These birds were outfitted and released after dark into the rest area of the Bear River Club. They swam off in a

group, but were seen 30 minutes later flying towards a large group of foraging WHSW.

In total, 20 TRSW (5 HY, 15 AHY) and 2 WHSW (both HY) were captured at HSP and released at BRMBR. An additional 3 HY WHSW were captured at BRMBR and released. All birds were marked with white neck collars, 8 were given feather mount transmitters and 14 collar mounted transmitters. All birds were free flying by the evening of 11-18-96.

During this time frame an additional 34 TRSW were released on the Bear River at Preston, ID. These birds were given green neck collars and dyed pink along the back. While not a part of the Utah study, these birds are being monitored by Utah DWR and on the refuge, by USFWS. To date no pink birds have been sighted in the GSL Basin (although an unconfirmed, secondhand report of 2 pink birds was made by Bear River Club hunters).

All released swans are being monitored on a rotating 8 hour block each day. Marked birds make large movements, especially at night, between unit 1 and Bear River Club and Public Shooting Grounds to the north. Activity budgets have been collected on several TRSW. All swans are also monitored during weekly aerial surveys. As of 12-3-96 (approximately 2 weeks after release), 8 of 22 radio-marked swans were located in the study area. Two birds dropped their transmitters (1 neck collar and 1 feather mount). Six birds have not been located for >10 days and may have left the area. Six radio-marked (and 1 collared but not radio-marked) birds were legally harvested. Of the 7 hunting mortalities, 5 occurred within 48 hours of release and may be release related. Six of the mortalities were TRSW (3 HY and 3 AHY) and 1 was a WHSH (HY) captured at HSP.

Tundra swan populations were approximately 50% higher than 1995 peaks. An estimated 30,000 WHSW were observed in the GSL Basin on 11-19-96. The majority of these birds used units 1 and 4 of the refuge, and the Bear River Club. Harvest data is presently being analyzed, and total harvest is expected to be higher than in previous years. Bill length measurements did not indicate any TRSW in the harvest (with the exception of the 6 collared birds). No green-collared birds have been observed in the area. One uncollared TRSW was observed in unit 4 of the refuge on 11-11-96. A black-collared WHSW was observed on Salt Creek on 11-30-96.

Ice began to form the last few days of November. As of 12-3-96, 80% of the study area had some ice forming and WHSW numbers were down to 17,000. Monitoring and data analysis is continuing, and preparations are underway to transport 50-100 TRSW in early December. This sample will be marked with yellow neck collars and dyed pink on one wing for easy observation. Approximately 10 birds will receive radio transmitters left-over from the November release.