Cinnamon Teal / Waterfowl Banding Project 2016

Biological Summary Report

Monte Vista NWR, SLV NWR Complex, CO

August - September 2016

Prepared by: Dean Lee

Photo by Dean Lee, USFWS

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Crew Leader(s): Dean Lee, Refuge Complex Biological Technician

Scott Miller, Refuge Complex Biologist

Crew Member(s): SCA's, YCC, BLM

Other Assistant(s): Casey Setash, *Colorado State University* (Grad student), various other volunteers and groups.

Purpose:

There is little information available regarding Cinnamon Teal (CITE) population dynamics and harvest pressure. Due to limited data that is available, waterfowl biologist are not able to adequately calculate survival estimates based on age or sex. Without adequate sampling pools and analysis of data, management decisions cannot be accurately made with any type of reasonable certainty. Dave Olson with the Migratory Bird Program (USFWS) set forward to develop a banding project in an attempted to 1) collect enough data so a reliable survival rate can be calculated and 2) derivation and distribution of the harvest can be better understood for making management decisions (Olson 2014). The project design called for a 5 year banding project resulting in a minimum banding number of 5,700 CITE within the first 4 years. Colorado was selected as one of 5 states to participate in this project. It was determined that the focus of banding activity in Colorado would be narrowed to the San Luis Valley (SLV). Potential banding sites were identified as Monte Vista NWR (MV), Alamosa NWR, Blanca Wetland Management Area (BLM), and Russell Lakes SWA (CPW). Cooperative efforts were made with the land managers with each of these properties and banding efforts started in the summer of 2012.

This field season (2016), banding efforts occurred only on Monte Vista NWR (MV). In addition to banding this year, Todd Felix from the USDA-APHIS – Wildlife Services conducted tests for Avian Influenza Virus (AIV). Testing consisted of oral and cloaca swab sampling. CSU

Graduate Student Casey Setash also returned to continue her study of Cinnamon Teal ecology. New this year, she attempted to capture CITE hen's by the use of live decoy ducks during the pairing/mating season. Leg bands and radio transmitters were installed on the hens. This was done in attempts to increase the number of captured hens that would be monitored throughout the nesting season. Casey also assisted the banding crews with banding, and performed nasal disc tagging to several female CITE. This was done in an effort to assist in the following years surveys of CITE in regards to habitat use and philopatry (Setash 2015).

Photo by Dean Lee, USFWS - CITE hen w/ radio transmitter implant

Photo by Dean Lee, USFWS - Nasal disc implant.

Methods:

There were eight trap sites selected at Monte Vista NWR (Fig 1). Trap sites were selected based on wetland basins that provided shallow but reliable water levels (6-12 inches) and accessibility to sites by banding crews. Benning II swim-in traps were used at each site and assembly of traps (using zip-ties) occurred on shore, and then walked out into the water by banding crews. Traps were set in place and baited, with barley, during the week of August 1st. Banding operations started on August 8th and ended on September 7th.

Materials and equipment used for banding operations consisted of eight Benning II traps, a catch/transport cage (for removing ducks from Benning II traps and transporting to shore), a make-shift float/raft for hauling catch cage and buckets of bait, fishing net with 30+" dia. netting (for removing ducks from the top of Benning II trap), retractable dog leash (for use as trip string on catch cage), styrofoam floats and metal rods (for placement inside traps to provide an area for ducks to get out of the water and dry off), and rubber bungee cords (for securing the side door and roof panel used for removal of ducks via the fishing net). Several tons of barley grain seed was donated to the Refuge by Coors Brewing Company, and was used for the baiting of traps.

Approximately ½ to 1 full bucket of grain was used at each trap site daily. If it was found that not all of the grain that was dispersed the previous day was completely consumed, the amount of grain would be cut back until a suitable level was obtained. Banding operations occurred every day of the week from approximately 0700 hrs. through until all traps were processed, except for a couple of weekend days. During those days that no banding occurred, traps were left "open", but were checked and baited daily.

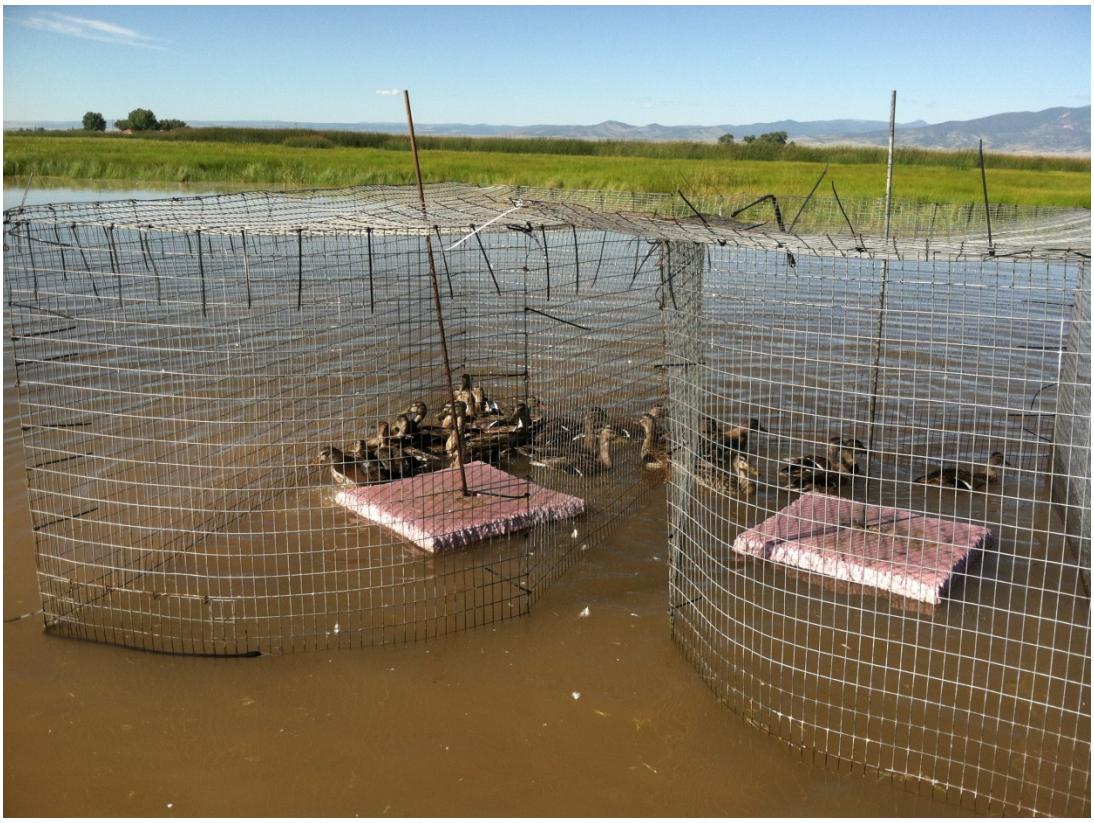

Photo by Dean Lee, USFWS - Benning II Swim-in traps

Banding sites:

Monte Vista NWR

MV #1 – Unit 24 – Second series of open water. Located approximately 40 yards away from road/levee.

MV #2 – Unit 24 – Third series of open water. Located approx. 20 yards away from road/levee.

MV #3 – Series Pond #3 (Unit 7) – Impoundment located SSE from Parking area # 1

MV #4 – Series Pond #4 (Unit 7) – Impoundment located ENE from Parking area # 1.

MV #5 – Unit 15 East – Impoundment located in the NE corner of unit.

MV #6 – Unit 15 West – Next impoundment located west of Unit 15 East.

MV #7 – Spring Creek Pond (Unit 14) – Trap site location was on south end of pond, near service road.

MV #8 – Spring Creek Pond (Unit 14) – Trap site location was on south end of pond, near service road.

Photo by Dean Lee, USFWS - Banding site MV # 7

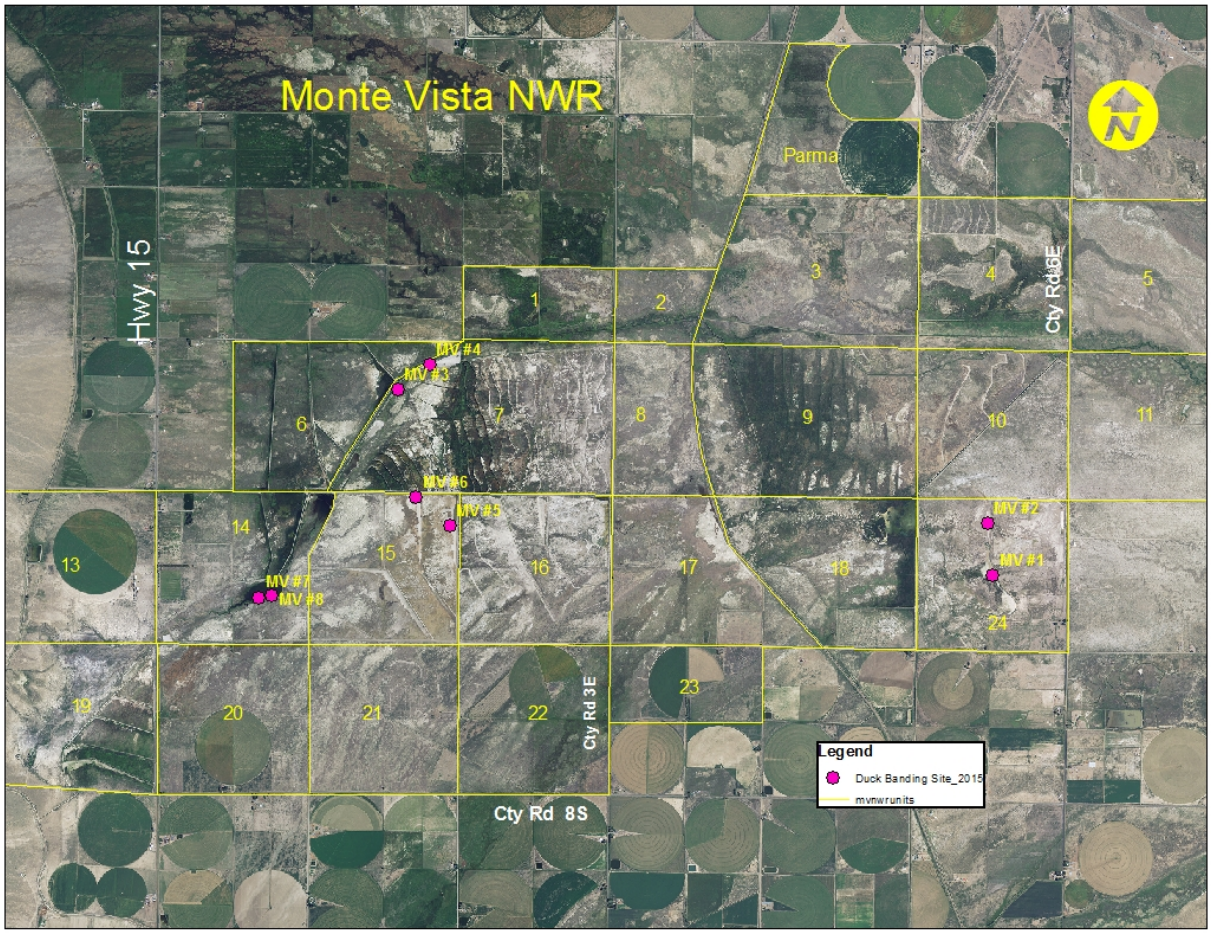

Figure 1: 2016 Duck Banding Sites - MVNWR

Results:

Banding operations started on August 8th and ended on September 7th. During that time a total of 1,713 ducks were banded on MV. A total of 1341 CITE were banded, along with 351 Mallards and 21 "Other" species of ducks (Table 1). Unfortunately, there were 6 confirmed mortalities that were discovered as a result of trapping efforts. A total of 43 ducks were recaptured from previous banding efforts. They consisted of 15 CITE and 28 Mallards. There were also 158 nasal tags placed on female CITE.

A break-down of the numbers of ducks banded is as follows:

- Out of the 1341 CITE banded, there were 136 adult (AHY) males (AM), 538 immature (HY) males (IM), 135 adult (AHY) females (AF), and 532 immature (HY) females (IF).

- Out of the 351 Mallards banded, there were 116 (AM), 108 (IM), 55 (AF), and 72 (IF).

- Out of the 21 “Other” species of ducks banded, there were 6 Redheads, 1 Gadwalls, 4 Northern Pintails, 1 Wood Duck and 9 American Green-wing Teal.

Species	AM	IM	AF	IF	Total
Cinn. Teal(CITE)	136	538	135	532	1341
Mallard (MALL)	116	108	55	72	351
Redhead (REHD)	0	3	1	2	6
Gadwall (GADW)	0	0	1	0	1
N. Pintail (NOPI)	0	3	0	1	4
Wood Duck (WODU)	1	0	0	0	1
Amer.G.W. Teal (AGWT)	1	3	1	4	9
				Total	1713

Table 1: Ducks Banded by species, age, and sex - MVNWR 2016

Discussion:

As the banding numbers demonstrated, it turned out to be an outstanding year for CITE production. This was attributed to quality amounts of early season water in nesting units, as well as a steady river run-off.

As compared to last year (20 mortalities), the mortality rate was far less with only 6 birds. It was noticed that this year’s juveniles were much larger in size compared to last year’s juveniles and thus contributed to the low number of mortalities.

Acknowledgements:

Dave Olson, USFWS - *Migratory Bird Program Region 6*, Denver, CO

Casey Setash, Graduate Student - *Colorado State University*

Todd A. Felix, Wildlife Biologist - *USDA-APHIS-Wildlife Services*; Lakewood, CO (303)-870-2736 cell, **todd.a.felix@aphis.usda.gov**

References:

Olson, Dave 2014 - Cinnamon Teal Banding Report 2014 Update; (Olson 2014)

Setash, Casey 2015 - Report on the 2015 Colorado cinnamon teal population ecology pilot season; *Colorado State University*, (Setash 2015)


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