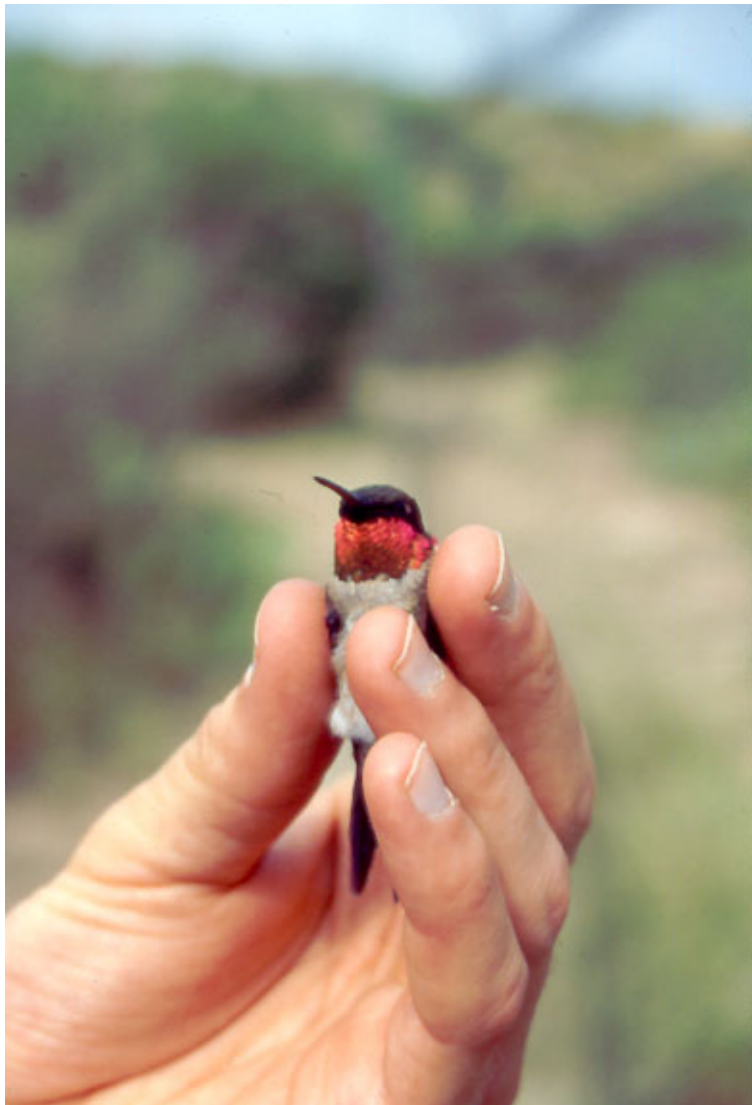


2000 Bird Migration Report for Amistad National Recreation Area

By

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National Park Service

April, 2004



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Introduction

The purpose of this report is to present a summary of birds captured during migratory bird banding at two locations within Amistad National Recreation Area, Texas during May 2000 (Figure 1). This report presents a brief background on each banding location and a summary of the basic information obtained from the field.



Figure 1. Location of Amistad National Recreation Area in Texas.

Migration Banding

The purpose of migration bird banding through constant-effort mist netting is to provide baseline resource data on the presence of migratory birds and determine the importance of managed lands within Amistad National Recreation Area for providing migratory bird habitat. With baseline information gained through this study, park management can protect these habitats for migratory and resident bird species. Figure 2 provides a view of Amistad NRA and the locations where bird banding has been completed.



Figure 2. Bird Banding locations within Amistad NRA during 2000 to 2002

Banding Locations

Constant-effort mist netting occurred on May 4, 2000 at Lowry Springs. Lowry Springs migration station is located in southwest Val Verde County, Texas. UTM location for this site is E (313,629) and N (3,278,791). Latitude is (29,37,29) and Longitude is (100,55,28). See figure 3 for location map. Lowry Springs is a tributary of the Devils River, located in the northern region of Amistad NRA.

Constant-effort mist netting occurred on May 20, 2000 at Satan Canyon. Satan Canyon migration station is located in southwest Val Verde County, Texas. UTM location for this site is E (310,431) and N (3,283,027). Latitude is (29,39,45) and Longitude is (100,57,30). See figure 3 for location map. Satan Canyon is a tributary of the Devils River, located in the northern region of Amistad NRA.

Lowry Springs contains a guajillo (*Acacia berlandieri*) and blackbrush (*Acacia rigidula*) dominate vegetation type with a smaller representation of Texas persimmon (*Diospyros texana*) and mountain laurel (*Sophora secundiflora*). Plateau live oak (*Quercus fusiformis*) is found in the drainage and represents a small component for the site. Grasses and forbs dominate the understory of the site. The habitat is relatively contiguous throughout the station.

Satan Canyon contains a plateau live oak (*Quercus fusiformis*), honey mesquite (*Prosopis glandulosa*), and huisache (*Acacia farnesiana*) dominate vegetation canopy at the station with an understory represented by mountain laurel (*Sophora secundiflora*), blackbrush (*Acacia rigidula*), and guayacan (*Guaiacum angustifolium*). Grasses and forbs dominate the understory of the site. The habitat is characterized by large plateau live oak motts surrounded by lower shrub habitat and reservoir inundation zone. This site also contains some of the largest guayacan trees in the whole park.

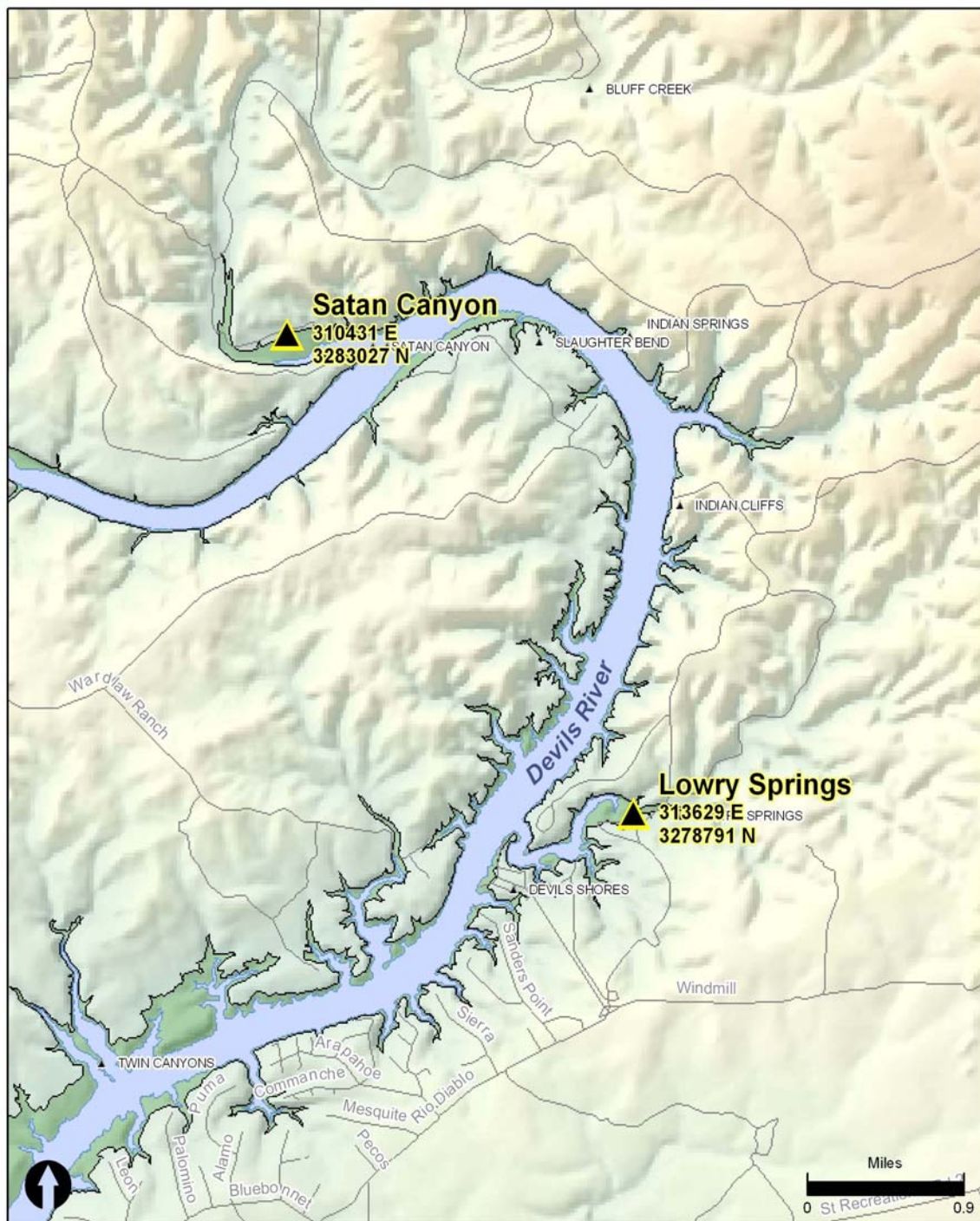


Figure 3. Bird banding locations for Lowry Springs and Satan Canyon, including UTM locations.

Methods

Seven 12-meter long by 2.6 meter high (40 feet by 8.5 feet) with four shelves and 30mm (1.2 in) mesh mist nets were placed at the Lowry Springs migration station. The nets were opened at 0600 a.m. and closed at 1200 p.m., 6 hours of operation. Nets were placed facing vegetation edges along the old access road. Net locations were chosen to be in areas of high use by birds, areas where nets could blend with the vegetation, and be out of direct sunlight to the greatest extent possible. Temporary metal stakes and poles were used to place nets. One GPS location was taken in the center of the station.

Eight 12-meter long mist nets were placed at the Satan Canyon migration station. The nets were opened at 0600 a.m. and closed at 1100 a.m., 5 hours of operation. Nets were placed along the access road, under the canopy of large oaks and along the edges of huisaches and mesquite. Temporary metal stakes and poles were used to place nets. One GPS location was taken in the center of the station. Net closure time was based on sun exposure and temperatures.

David Larson, Natural Resources Program Manager, Amistad National Recreation Area, operated the two stations, Master Banding permit holder (#22946, U.S. Fish and Wildlife Service) during the year 2000. Whitney Howeth and Randy Rosales (Amistad NRA Resource SCA volunteers) assisted on the project.

Results

The following information is a summary of the data obtained at the two stations. Field information collected on each bird banded can be found in Appendix 1. In Appendix 2, banding data summary on birds documented at the Rio Grande Weir dam on 5/11/00 is described.

Number of species captured at Lowry Springs was 15 species. Total number of birds captured was 25 birds. See table 1 for species and number of birds captured at Lowry Springs.

Table 1. Species and number of birds captured at Lowry Springs.

CODE	SPECIES	Number, Year 2000
BCHU	Black-chinned Hummingbird	1*, (+)
BCTI	Black-crested Titmouse	1, (+)
BEVI	Bell's Vireo	3, (+)
BEWR	Bewick's Wren	2
BTSP	Black-throated Sparrow	1, (+)
CACW	Cactus Wren	1*
CCSP	Clay-colored Sparrow	1, (+)
COGD	Common Ground-Dove	1, (+)
NOMO	Northern Mockingbird	2, (+)
OROR	Orchard Oriole	1, (+)
PABU	Painted Bunting	4, (+)
RCSP	Rufous-crowned Sparrow	1*
RTHU	Ruby-throated Hummingbird	1*, (+)
WEVI	White-eyed Vireo	2, (+)
YBCH	Yellow-breasted Chat	3, (+)
* Birds not banded. (+) Bird's photo vouchered.		

Number of species captured at Satan Canyon was 16 species. Total number of birds captured was 52 birds. See table 2 for species and number of birds captured at Satan Canyon.

Table 2. Species and number of birds captured at Satan Canyon.

CODE	SPECIES	Number, Year 2000
AMRE	American Redstart	1*
BCFL	Brown-crested Flycatcher	5
BCHU	Black-chinned Hummingbird	1*
BEVI	Bell's Vireo	3
BEWR	Bewick's Wren	8, 1*
BROC	Bronzed Cowbird	2, (+)
COGD	Common-ground Dove	2
COYE	Common Yellowthroat	1
NOCA	Northern Cardinal	9
NOMO	Northern Mockingbird	1
PABU	Painted Bunting	5, 1*
SUTA	Summer Tanager	1
VERD	Verdin	2
WEVI	White-eyed Vireo	6
YBCH	Yellow-breasted Chat	2
YEWA	Yellow Warbler	1
* Birds not banded. (+) Bird's photo vouchered.		

Discussion

Migratory species confirmed at Lowry Springs included one Clay-colored Sparrow (*Spizella pallida*) and one male Ruby-throated Hummingbird (*Archilochus colubris*). Migratory species confirmed at Satan Canyon included one female American Redstart (*Setophaga ruticilla*), which escaped while being extracted from the mist net, and one Yellow Warbler (*Dendroica petechia*).

Resident and summer breeding species captured at Lowry Springs represented characteristic brushland community species. Capture rates were moderate in comparison to Satan Canyon, 25 birds for 6 hours of operation with 7 nets.

Resident and summer breeding species captured at Satan Canyon represented characteristic oak mott/brushland community species. Capture rates were double the rate found at Lowry Springs, 52 birds for 5 hours of operation with 8 nets.

Management Recommendations

Lowry Springs should be managed to protect the brushland vegetation type found in the area. This habitat includes an array of Trans-Pecos plant species and provides good vegetation structure for a varied number of bird species. This site is a good area for recreational birders to visit.

Satan Canyon is currently found in a state of vegetation regeneration. Visitor use in the area has been restricted since the start of the 1993 draught. Reservoir water levels have been low since 1993, restricting motor boat access to the entrance of Satan Canyon. There is an estimated 15 old campsites and fire rings under the oak motts, found on the west end of the station. It is recommended that visitor access and use of this area be managed to prevent vegetation loss and negative impacts on the oak motts. If livestock grazing becomes active again in the area, a fencing project could be initiated to prevent heavy grazing pressures on the oak mott area. At this time there are a number of old oaks in the area, but very little regeneration. Controls should be put in place to prevent further degradation of this rare park resource.

David Hays, GIS specialist for Amistad NRA, created all the figures displayed in this report. Cover photo is of a Ruby-throated Hummingbird, captured at Lowry Springs (photo by David Larson).

Appendix 1: Original banding data for Lowry Springs (AMISLOSP) on 5/4/00 and Satan Canyon (AMISSACA) on 5/20/00.

Amistad National Recreation Area											
Year 2000 Bird Migration Data											
Bander: David H. Larson. National Park Service											
bandnumb	bandstat	spcd	aou	yr	mo	day	sex	age	birdstat	location	initials
1711-35354	1	BCTI	7320	2000	5	4	0	1	300	AMISLOSP	DHL
1691-67241	1	BEVI	6330	2000	5	4	0	1	300	AMISLOSP	DHL
1180-08635	1	BEVI	6330	2000	5	4	0	1	300	AMISLOSP	DHL
1180-08636	1	BEVI	6330	2000	5	4	4	5	300	AMISLOSP	DHL
1691-67240	1	BEWR	7190	2000	5	4	0	1	300	AMISLOSP	DHL
1691-67242	1	BEWR	7190	2000	5	4	5	1	300	AMISLOSP	DHL
1671-28638	1	BTSP	5730	2000	5	4	4	1	300	AMISLOSP	DHL
1180-08638	1	CCSP	5610	2000	5	4	0	1	300	AMISLOSP	DHL
0832-77047	1	COGD	3200	2000	5	4	4	1	300	AMISLOSP	DHL
0832-77046	1	NOMO	7030	2000	5	4	0	1	300	AMISLOSP	DHL
0832-77048	1	NOMO	7030	2000	5	4	0	1	300	AMISLOSP	DHL
1681-72838	1	OROR	5060	2000	5	4	4	5	300	AMISLOSP	DHL
1671-28634	1	PABU	6010	2000	5	4	5	1	300	AMISLOSP	DHL
1671-28635	1	PABU	6010	2000	5	4	5	1	300	AMISLOSP	DHL
1671-28636	1	PABU	6010	2000	5	4	5	1	300	AMISLOSP	DHL
1671-28637	1	PABU	6010	2000	5	4	5	1	300	AMISLOSP	DHL
1180-08637	1	WEVI	6310	2000	5	4	0	1	300	AMISLOSP	DHL
1180-08639	1	WEVI	6310	2000	5	4	5	1	300	AMISLOSP	DHL
1681-72836	1	YBCH	6830	2000	5	4	4	6	300	AMISLOSP	DHL
1681-72837	1	YBCH	6830	2000	5	4	4	6	300	AMISLOSP	DHL
1681-72839	1	YBCH	6830	2000	5	4	5	1	300	AMISLOSP	DHL
1681-72852	1	BCFL	4530	2000	5	20	5	1	300	AMISSACA	DHL
1681-72853	1	BCFL	4530	2000	5	20	0	1	300	AMISSACA	DHL
1681-72854	1	BCFL	4530	2000	5	20	0	1	300	AMISSACA	DHL
1681-72855	1	BCFL	4530	2000	5	20	0	1	300	AMISSACA	DHL
1681-72856	1	BCFL	4530	2000	5	20	0	1	300	AMISSACA	DHL
1180-08654	1	BEVI	6330	2000	5	20	0	1	300	AMISSACA	DHL
1180-08658	1	BEVI	6330	2000	5	20	5	1	300	AMISSACA	DHL
1180-08661	1	BEVI	6330	2000	5	20	5	1	300	AMISSACA	DHL
1691-67255	1	BEWR	7190	2000	5	20	0	1	300	AMISSACA	DHL
1691-67256	1	BEWR	7190	2000	5	20	0	2	300	AMISSACA	DHL
1691-67257	1	BEWR	7190	2000	5	20	0	1	300	AMISSACA	DHL
1691-67258	1	BEWR	7190	2000	5	20	0	1	300	AMISSACA	DHL
1691-67259	1	BEWR	7190	2000	5	20	0	2	300	AMISSACA	DHL
1691-67260	1	BEWR	7190	2000	5	20	0	1	300	AMISSACA	DHL
1691-67261	1	BEWR	7190	2000	5	20	0	2	300	AMISSACA	DHL
1691-67262	1	BEWR	7190	2000	5	20	0	1	300	AMISSACA	DHL
0832-77063	1	BROC	4960	2000	5	20	4	6	300	AMISSACA	DHL
0832-77065	1	BROC	4960	2000	5	20	4	6	300	AMISSACA	DHL
0832-77057	1	COGD	3200	2000	5	20	4	1	300	AMISSACA	DHL
0832-77058	1	COGD	3200	2000	5	20	4	1	300	AMISSACA	DHL

Appendix 1 Continued: Original banding data for Lowry Springs (AMISLOSP) on 5/4/00 and Satan Canyon (AMISSACA) on 5/20/00.

bandnumb	bandstat	spcd	aou	yr	mo	day	sex	age	birdstat	location	initials
1671-28683	1	COYE	6810	2000	5	20	5	1	300	AMISSACA	DHL
0832-77056	1	NOCA	5930	2000	5	20	4	1	300	AMISSACA	DHL
0832-77059	1	NOCA	5930	2000	5	20	5	1	300	AMISSACA	DHL
0832-77060	1	NOCA	5930	2000	5	20	4	1	300	AMISSACA	DHL
0832-77061	1	NOCA	5930	2000	5	20	0	2	300	AMISSACA	DHL
0832-77062	1	NOCA	5930	2000	5	20	4	1	300	AMISSACA	DHL
0832-77066	1	NOCA	5930	2000	5	20	4	1	300	AMISSACA	DHL
0832-77067	1	NOCA	5930	2000	5	20	5	1	300	AMISSACA	DHL
0832-77068	1	NOCA	5930	2000	5	20	0	2	300	AMISSACA	DHL
0832-77069	1	NOCA	5930	2000	5	20	5	1	300	AMISSACA	DHL
0832-77064	1	NOMO	7030	2000	5	20	0	1	300	AMISSACA	DHL
1671-28679	1	PABU	6010	2000	5	20	5	1	300	AMISSACA	DHL
1671-28680	1	PABU	6010	2000	5	20	5	5	300	AMISSACA	DHL
1671-28681	1	PABU	6010	2000	5	20	4	5	300	AMISSACA	DHL
1671-28682	1	PABU	6010	2000	5	20	5	5	300	AMISSACA	DHL
1671-28684	1	PABU	6010	2000	5	20	4	5	300	AMISSACA	DHL
1681-72849	1	SUTA	6100	2000	5	20	4	6	300	AMISSACA	DHL
2130-57222	1	VERD	7460	2000	5	20	0	1	300	AMISSACA	DHL
2130-57223	1	VERD	7460	2000	5	20	5	1	300	AMISSACA	DHL
1180-08653	1	WEVI	6310	2000	5	20	5	6	300	AMISSACA	DHL
1180-08655	1	WEVI	6310	2000	5	20	0	5	300	AMISSACA	DHL
1180-08656	1	WEVI	6310	2000	5	20	0	5	300	AMISSACA	DHL
1180-08657	1	WEVI	6310	2000	5	20	0	5	300	AMISSACA	DHL
1180-08659	1	WEVI	6310	2000	5	20	0	5	300	AMISSACA	DHL
1180-08660	1	WEVI	6310	2000	5	20	0	1	300	AMISSACA	DHL
1681-72850	1	YBCH	6830	2000	5	20	4	6	300	AMISSACA	DHL
1681-72851	1	YBCH	6830	2000	5	20	4	6	300	AMISSACA	DHL
1180-08652	1	YWAR	6520	2000	5	20	5	5	300	AMISSACA	DHL

Sex: 0 = unknown; 4 = male; 5 = female.

Age: 2 = HY (Hatch Year); 5 = SY (Second Year); 1 = AHY (After Hatch Year); 6 = ASY (After Second Year).

Appendix 2: Banding data summary on birds banded at Weir dam site on 5/11/00, Amistad NRA.

On 5/11/00, six mist nets were placed for two hours (6a.m. to 8 a.m.) along the main access road edge, approximately 100 meters southeast of the Rio Grande weir dam, see figure 1. UTM location for the activity was 302,101 E and 3,256,378 N. Banding was conducted for educating visiting regional NPS employees on the importance of riparian habitat along the Rio Grande.

Three birds were captured during this activity, one Brown-crested Flycatcher (*Myiarchus tyrannulus*) and two Painted Buntings (*Passerina ciris*).

Table 1. Original banding information on species captured.

bandnumb	bandstat	spcd	aou	yr	mo	day	sex	age	birdstat	location	initials
1681-72840	1	BCFL	4530	2000	5	11	0	1	300	AMISWEIR	DHL
1671-28639	1	PABU	6010	2000	5	20	5	6	300	AMISWEIR	DHL
1671-28640	1	PABU	6010	2000	5	11	5	1	300	AMISWEIR	DHL

Sex: 0 = unknown; 5 = female.

Age: 1 = AHY (After Hatch Year); 6 = ASY (After Second Year).

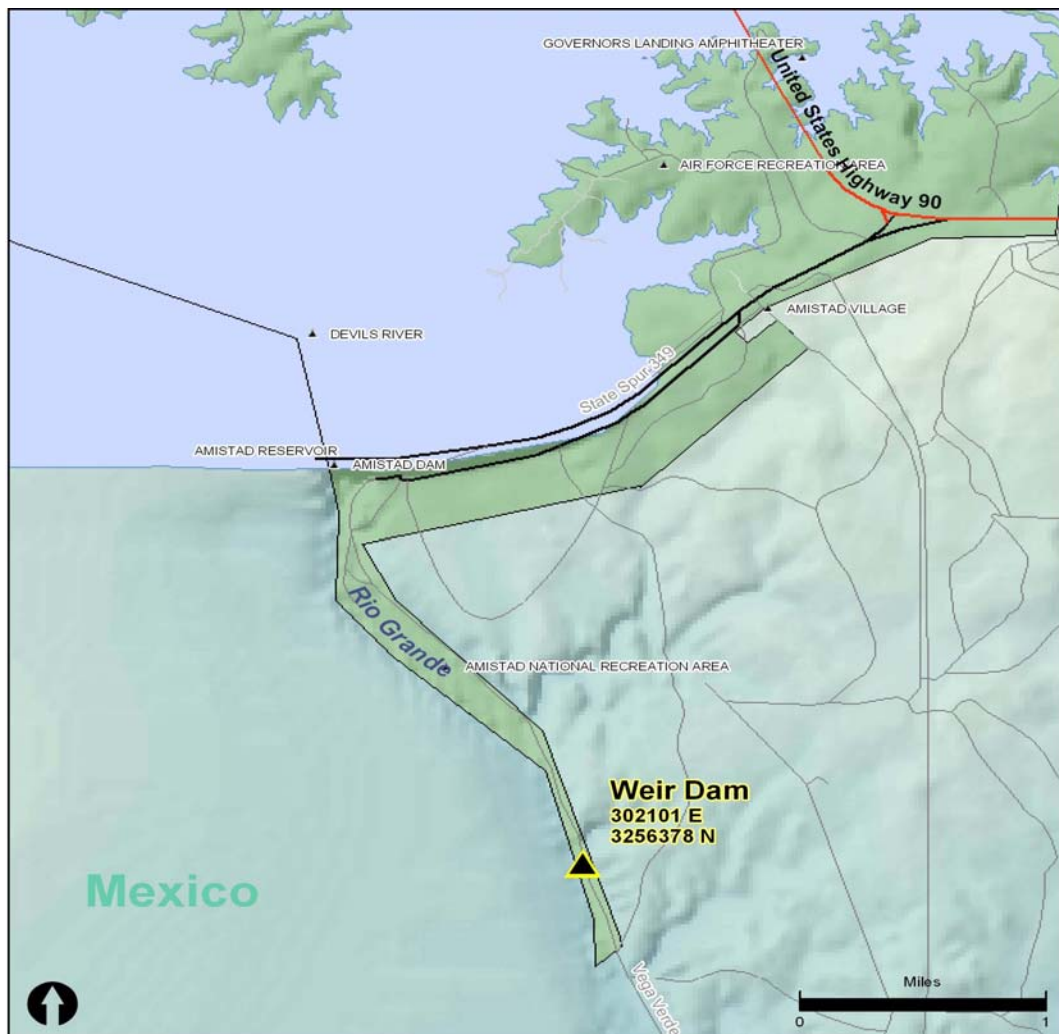


Figure 1. Weir dam bird banding location.