2010 WILLOW FLYCATCHER SURVEYS AT

BLUEWATER CANYON, LOST VALLEY, SAN YSIDRO, AND WILSON CANYON, ${\sf NEW\ MEXICO}$



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EXECUTIVE SUMMARY

The Southwestern Willow Flycatcher (Empidonax traillii extimus) is a federally endangered migrant songbird which breeds locally in riparian areas of New Mexico. The Bureau of Land Management (BLM), Albuquerque Field Office, manages several sites containing potential Southwestern Willow Flycatcher habitat. From 1998-2007, Hawks Aloft, Inc. conducted annual surveys at three of these central New Mexico sites: Bluewater Canyon, Lost Valley, and San Ysidro. Hawks Aloft did not conduct surveys for Southwestern Willow Flycatchers at these sites from 2008-2009, but in 2010, surveys were reinitiated and a fourth site was added at Wilson Canyon. In 2010, we recorded four Willow Flycatchers at Lost Valley and two at San Ysidro. Detections at both sites occurred on both the first and second visits, between 27 May and 5 June. However, because none of the observations occurred during the third survey period, we cannot confirm the presence of territorial Southwestern Willow Flycatchers. Nevertheless, each site could offer important stopover habitat and resources for migrating Willow Flycatchers, including the endangered Southwestern subspecies. Because migrant Willow Flycatchers have been observed at each site, and territorial Southwestern Willow Flycatchers could occur in future years, BLM should continue to maintain and improve conditions at Bluewater Canyon, Lost Valley, San Ysidro, and Wilson Canyon. We recommend continued annual surveys at Bluewater Canyon, Lost Valley, and San Ysidro to document presence of Willow Flycatchers and temporal changes in habitat, conditions, or patterns of occupancy. Until habitat conditions at Wilson Canyon become more suitable, we feel that the continuation of breeding bird surveys, as opposed to formal Willow Flycatcher surveys, would be sufficient in detecting the occurrence of the species.

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INTRODUCTION

Riparian corridors provide important habitat for breeding birds in arid regions of the western United States (Knopf and Samson 1994). Although western riparian areas occupy less than one percent of the landscape, many support more breeding bird species than surrounding upland habitats (Knopf et al. 1988, Gates and Giffen 1991, Powell and Steidl 2000). Because riparian areas are disproportionally important to a number of species, management decisions that maintain or improve their condition are imperative. This is especially true when riparian areas host rare or endangered species.

The Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is a federally endangered migrant songbird which breeds locally in riparian areas of New Mexico (U.S. Fish and Wildlife Service 1995, Bureau of Reclamation 2006). Southwestern Willow Flycatchers inhabit dense riparian vegetation, including both native (e.g., cottonwood, *Populus* spp., and willow, *Salix*, spp.) and non-native (e.g., salt cedar, *Tamarix* spp.) woody plants (Sogge et al. 2003). Habitat for Southwestern Willow Flycatchers is usually in close proximity to water or saturated soils (Sedgwick 2000).

Because of morphological and vocal similarities, it is difficult to distinguish between Southwestern Willow Flycatchers and other subspecies of Willow Flycatcher. Despite this difficulty, the seasonal timing of an observation can help identify the endangered Southwestern subspecies. Multiple subspecies of Willow Flycatcher can be observed in New Mexico during the migration period, but only Southwestern Willow Flycatcher regularly remains in the state to breed (Sogge et al. 1997). Therefore, surveys documenting Willow Flycatchers throughout the breeding season can provide an indication of local Southwestern Willow Flycatcher presence.

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The Bureau of Land Management (BLM), Albuquerque Field Office, manages several riparian sites in central New Mexico with potential Southwestern Willow Flycatcher habitat. BLM contracted Hawks Aloft, Inc. to conduct annual Willow Flycatcher surveys at three sites from 1998-2007: Bluewater Canyon, Lost Valley, and San Ysidro. Hawks Aloft did not conduct surveys in 2008-2009, but surveys at those three sites, along with a fourth site at Wilson Canyon, were reinitiated in 2010.

We have documented small numbers of Willow Flycatchers using one or more of the survey sites each year, but our consistent lack of observations late in the season indicates that these birds were probably migrant Willow Flycatchers (subspecies unknown) and not territorial Southwestern Willow Flycatchers. Continued surveys are important to document Southwestern Willow Flycatcher territories, if they occur, and further evaluate patterns of use by migrants. In this report, we provide information on methodology, site conditions, and Willow Flycatcher observations at Bluewater Canyon, Lost Valley, San Ysidro, and Wilson Canyon in 2010. We indicate potential Southwestern Willow Flycatcher presence based on the seasonal timing of observations.

STUDY AREA

Bluewater Canyon

The Bluewater Canyon survey area included approximately 4 km of Bluewater Creek in Cibola County, New Mexico (Figs. 1, 2). Bluewater Creek flows through a steep-walled canyon with linear patches of mostly native vegetation. Dominant vegetation included coyote willow (*Salix exigua*), juniper (*Juniperus* spp.), narrowleaf cottonwood (*Populus angustifolia*), cliffrose (*Cowania mexicana*), and rubber rabbitbrush

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(Chrysothamnus nauseosus). Beaver (Castor canadensis) activity has reduced the number of mature cottonwoods to the point that, in 2010, only a few individuals over 2 m were present. Water flow in Bluewater Canyon is controlled by a dam located upstream from the site. Water is present in most years and high enough during some years to restrict access to narrow portions of the canyon. We encountered a fairly high water level in the canyon throughout the 2010 monitoring season.



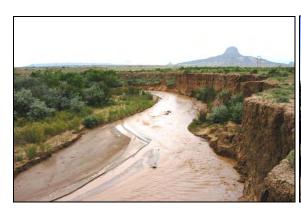
Bluewater Canyon contained mostly native vegetation in a narrow riparian canyon. Beaver activity has resulted in a reduction of large cottonwoods in the riparian corridor.

Lost Valley

The Lost Valley survey area included two sections totaling approximately 1.5 km along the Rio Puerco near Cabezon Peak and San Luis, in Sandoval County, New Mexico (Figs. 1, 3). Habitat consisted of mostly exotic vegetation, including salt cedar and Russian olive (*Elaeagnus angustifolia*), as well as native Fremont cottonwood (*P*.

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fremonti) and willow. Water levels in the Rio Puerco during the survey period often vary dramatically. The typical pattern of moderate water flow early in the survey season followed by a considerable reduction late in the survey season continued in 2010; virtually no surface water was present during the second half of the monitoring season.





Lost Valley water flow during the first survey (left) and the final survey (right) in 2007; water levels in 2010 were very similar to those documented in the photograph.

San Ysidro

The survey site at San Ysidro included approximately 800 m of riparian vegetation adjacent to the Rio Salado and the Perea Nature Trail near San Ysidro, in Sandoval County, New Mexico (Figs. 1, 4). This site contained dense, closed-canopy forest and scrub, as well as marsh habitat. Dominant vegetation included Russian olive, salt cedar, and bulrush (*Scirpus* spp.). Cattle grazing has likely limited vegetation growth in this part of the creek. Water flow in the Rio Salado varies annually and usually decreases as the survey season progresses. After a wet year in 2005, subsequent survey seasons, including 2010, have been relatively dry.

In April 2010, Hawks Aloft and BLM personnel visited the site to investigate reports of impediments to water flow into the marsh. The team determined that an illegal

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containment dam was restricting the flow of water into the marsh and redirecting it into an adjacent pasture. BLM staff later returned to San Ysidro and cut a small channel in the dam in an attempt to restore water to the marsh. Hawks Aloft personnel visited the site after a high water flow episode in mid-August, and although the small channel was allowing some water to enter the marsh, a large percentage of the flow blocked by the dam was continuing to drain into the adjacent pasture. We recommend that BLM continue their efforts to remove the dam prior to the onset of the 2011 breeding season, and continue their investigation of the legal water rights and usage of upstream neighbors. The return of water flow to the marsh at San Ysidro would benefit many riparian species, and should be one of the higher priorities of BLM Albuquerque.

Wilson Canyon

The Wilson Canyon survey area includes approximately 1.2 km of the Rio Puerco, about 10 km south of Cuba, New Mexico (Figs. 1, 5). Wilson Canyon is dominated by herbaceous vegetation and shrubs (average canopy height for the canyon is approximately 1 m), and trees taller than 3 m, primarily cottonwood and Russian olive, make up only approximately one percent of the canopy within the riparian area. A large percentage of the vegetation in the canyon is comprised of upland species such as sage (*Artemisia* spp.), greasewood (*Sarcobatus vermiculatus*), and rabbitbrush which have encroached into the riparian corridor. The two most common riparian shrubs present in the canyon, willow and salt cedar (most of the salt cedar appears to have been killed by treatment), each make up about 5% of the vegetation, but both species average less than 2 m in height. Exclosures were erected in the past to allow vegetation to regenerate along the riverbank, but the planted cottonwoods, which average about 3 m in height and have

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canopy diameters of approximately 1.5 m, currently provide little benefit to riparian avifauna. At present, Wilson Canyon appears to hold no habitat suitable for breeding Willow Flycatchers. However, it is possible that migratory flycatchers could utilize the site, and with proper management, the likelihood of occupancy could increase. Water flow at Wilson Canyon was high during the first visit, but low on subsequent visits.

METHODS

Southwestern Willow Flycatcher surveys followed the standardized protocol developed by Sogge et al. (1997). All lead observers were trained to follow this protocol and certified to conduct Willow Flycatcher surveys under Hawks Aloft's Federal Fish and Wildlife permit (TE835139-0).

We conducted surveys during three survey periods: 15-31 May, 1-21 June, and 22 June-10 July. From 1998-2004, we conducted one survey per site in each of the three survey periods. Based on protocol revision by the U.S. Fish and Wildlife Service (2000), prescribing at least five visits for project-related surveys, BLM requested an additional two surveys per site during the third survey period. Therefore, a total of five surveys per year were conducted at each site from 2005-2007, and in 2010 (one in each of the first two survey periods and three in the third survey period). We conducted consecutive surveys at a site at least five days apart, beginning each survey within 30 minutes of sunrise and concluding within four hours.

During surveys, observers walked slowly through the site, stopping every 20-30 meters, or as necessary to adequately cover habitat patches. At each stop, surveyors listened for flycatcher vocalizations. If none were heard, taped vocalizations of a

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Southwestern Willow Flycatcher were played for 15-30 seconds, followed by one or two minutes of observation. The process was repeated if no flycatchers responded. Coordinates were recorded for each Willow Flycatcher observed. Because several species appear similar to Willow Flycatchers (e.g., Dusky Flycatcher, *E. oberholseri*), positive identification of a Willow Flycatcher required that the observer hear the distinctive "fitzbew" song (Sogge et al. 1997). Willow Flycatchers detected during the first two survey periods could constitute individuals of both the *E. t. extimus* or migratory adastus subspecies; only those individuals observed during the third survey period can readily be identified as Southwestern Willow Flycatchers because other migrant subspecies are not expected during that time (Sogge et al. 1997). We report the number and locations of Willow Flycatchers observed at each site and indicate probable Southwestern Willow Flycatchers, based on the seasonal timing of observations. We also present a list of other avian species seen or heard while conducting surveys (Appendix 1) and copies of U.S. Fish and Wildlife data summary forms (Appendix 2).

RESULTS

We recorded six Willow Flycatchers in 2010; four observations occurred at Lost Valley and two occurred at San Ysidro (Table 1). Because these observations occurred during the first and second survey periods, we could not confirm the presence of territorial Southwestern Willow Flycatchers at any of the sites, consistent with surveys in previous years. Because no detections occurred during the third survey period, the birds observed at Lost Valley and San Ysidro were likely migrant Willow Flycatchers, subspecies unknown.

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The four Willow Flycatcher observations recorded at Lost Valley in 2010 and the six recorded in 2007 account for 83% of the observations during the past two survey years (Table 1). Of the four observations in 2010, one occurred on 27 May and the other three occurred on 5 June (Table 2). We completed five surveys during 2010 in a cumulative 13:32 (hr:min) of survey time. No birds were observed during the final three visits, suggesting that the earlier detections were likely of migratory individuals.



Locations of Willow Flycatcher detections at Lost Valley in 2010. The photo at the top-left shows the site of a Willow Flycatcher observation on 27 May; the other three photos show the sites of the 3 June detections.

Observations of lone Willow Flycatchers occurred at San Ysidro on 28 May and 4 June (Table 2). As was the case at Lost Valley, no Willow Flycatchers were detected

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during the third survey period; the individuals detected during the first two periods likely did not breed at San Ysidro. Although detection numbers have decreased in recent years, San Ysidro has been the site of the majority of Willow Flycatcher detections since surveys began in 1998 (Table 1). A cumulative 6:01 (hr:min) of survey time occurred at San Ysidro in 2010.





Locations of Willow Flycatcher detections at San Ysidro in 2010. The photo on the left was the site of the 28 May detection, and the photo on the right was the site of the 4 June detection.

For the sixth consecutive survey year, we observed no Willow Flycatchers at Bluewater Canyon (Table 1). We completed five surveys in a cumulative 10:56 (hr:min) of survey time. The only two Willow Flycatcher detections at this site in the last ten years of surveys occurred on 9 June 2000 and 29 May 2002. The loss of tall cottonwood trees due to beaver activity has likely decreased habitat quality for Willow Flycatchers.

The first year of surveying for Willow Flycatchers at Wilson Canyon resulted in no detections of the species. This site harbors little riparian vegetation and, at present, seems the least likely of the four survey sites to support Willow Flycatchers. A cumulative 3:39 (hr:min) of survey time occurred at Wilson Canyon in 2010.

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DISCUSSION

Our surveys offer no evidence that Southwestern Willow Flycatchers breed at Bluewater Canyon, Lost Valley, San Ysidro, or Wilson Canyon. At central New Mexico riparian sites like these, the presence of singing Willow Flycatchers during the third survey period (i.e., 22 June through 10 July) strongly indicates that the individuals belong to the Southwestern subspecies (Sogge et al. 1997). Although we have recorded 39 Willow Flycatchers at the three sites that have been surveyed since 1998 (Table 1), none of the observations have occurred during a total of 57 third-period surveys. Therefore, Bluewater Canyon, Lost Valley, and San Ysidro are probably more valuable as migration stopover sites than breeding sites. The importance of Wilson Canyon to Willow Flycatchers cannot be predicted with only one year of survey data, but the current state of vegetation at the site leads us to speculate that the canyon is not currently utilized by breeding Willow Flycatchers, and the importance of the site to migrants is likely lower than the other survey locations.

Willow Flycatcher migration stopover habitat in New Mexico can be valuable because migrants might include the endangered Southwestern subspecies. The migration routes used by Southwestern Willow Flycatchers are not well known (U.S. Fish and Wildlife Service 2002), but Yong and Finch (1997) suggested that the Middle Rio Grande bosque provides important stopover habitat for Southwestern Willow Flycatchers to replenish energy stores. The proximity of our sites to the Middle Rio Grande, especially San Ysidro, makes them candidates for hosting migrant Southwestern Willow Flycatchers in some years. The U.S. Fish and Wildlife Service (2002) advised that even riparian patches unsuitable for breeding (e.g., too small or sparse) might be important

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resources affecting flycatcher survival. Although we have not documented breeding Southwestern Willow Flycatchers, our observations of Willow Flycatchers during some years support the possibility that Bluewater Canyon, Lost Valley, and San Ysidro might be included among important stopover sites.

Before 2007, we considered that San Ysidro offered the greatest potential for hosting migrating or breeding Southwestern Willow Flycatchers. This belief was based on the high percentage (67%) and consistency (observations during six of nine years) of Willow Flycatcher detections that occurred at San Ysidro. Although San Ysidro may still be the site of greatest potential for the species, our six observations of Willow Flycatchers at Lost Valley in 2007 and the four observed in 2010 have greatly improved our perception of that site. Total detections since 1998 are now similar between the two sites (44% at Lost Valley, 51% at San Ysidro), and it seems likely that both are important to migratory Willow Flycatchers. These two sites, if properly managed, may even support breeding pairs in the future. Both contain extensive patches of dense riparian vegetation, and although much of the vegetation is non-native, it has been shown that non-native species such as salt cedar can provide adequate habitat for nesting Willow Flycatchers (Sedgewick 2000). More consistent water flow at Lost Valley and San Ysidro could improve the likelihood that Willow Flycatchers will stop and remain to breed.

Water flow is generally consistent at Bluewater Canyon, but riparian habitat is relatively narrow. Suitability for Willow Flycatchers at Bluewater Canyon might improve with further maturation of willow patches and the regeneration of cottonwoods that have been reduced by beaver activity, although the narrow width of the canyon might limit the spatial extent of habitat patches. Restoration efforts that began at Wilson Canyon over a

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decade ago may eventually result in the creation of suitable habitat for Willow Flycatchers, but at present, the likelihood of utilization seems low.

Even if features and conditions at the survey sites become suitable, a Southwestern Willow Flycatcher population might be slow to establish since birds would need to disperse from a source population. Slightly greater than 400 Southwestern Willow Flycatcher territories have been identified in New Mexico (D. Hill, U.S. Fish and Wildlife Service, pers. comm.), most of which occur in the Gila River floodplain and the Rio Grande south of Socorro. Although recent data indicate that populations might be expanding (Bureau of Reclamation 2006), our sites are a considerable distance from most documented populations, perhaps limiting the probability of dispersal.

Because migratory flycatchers have been observed in some years, and territorial Southwestern Willow Flycatchers could occur in future years, BLM should continue to maintain and improve conditions at Bluewater Canyon, Lost Valley, San Ysidro, and Wilson Canyon. Lost Valley and San Ysidro should receive a high priority for management and restoration efforts, because we consistently find a small number of Willow Flycatchers at these sites early in the season. We recommend continued annual surveys at Bluewater Canyon, Lost Valley, and San Ysidro to document presence of Willow Flycatchers as well as temporal changes in habitat, conditions, or patterns of occupancy. Until habitat conditions at Wilson Canyon become more suitable, we feel that the continuation of annual breeding bird surveys, as opposed to formal Willow Flycatcher surveys, will be sufficient to detect the unlikely occurrence of the species at that site.

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Table 1. Number of Willow Flycatchers detected at Bluewater Canyon (BC), Lost Valley (LV), and San Ysidro (SY), New Mexico from 1998-2007; surveys were not conducted by Hawks Aloft in 2008-2009, but were reinitiated in 2010 and a fourth site, Wilson Canyon (WC), was added. Detections are categorized by survey period: 1 (15-31 May), 2 (1-21 June) and 3 (22 June–10 July). Three surveys per site were conducted during the third survey period from 2005-2007, and 2010; one survey per site was conducted during the third survey period in all other years.

| | | | Number of Willow Flycatchers detected | | | | | | | | | | | |
|---------------|----------|------|---------------------------------------|------|------|------|------|------|------|------|------|------|--|--|
| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2010 | | |
| | Period 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| \mathbf{BC} | Period 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| _ | Period 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | Period 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 1 | | |
| Γ | Period 2 | 0 | 3 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | | |
| | Period 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | Period 1 | 1 | 0 | 0 | 0 | 5 | 0 | 3 | 3 | 3 | 0 | 1 | | |
| SY | Period 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | |
| | Period 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | Period 1 | - | - | - | - | - | - | - | - | - | - | 0 | | |
| WC | Period 2 | - | - | - | - | - | - | - | - | - | - | 0 | | |
| | Period 3 | - | - | - | - | - | - | - | - | - | - | 0 | | |

Table 2. Universal Transverse Mercator coordinates for Willow Flycatchers detected at Lost Valley and San Ysidro, New Mexico in 2010. Each row represents one Willow Flycatcher detection. We observed no Willow Flycatchers at Bluewater Canyon or Wilson Canyon in 2010.

| Site | Date | Datum | Zone | Easting | Northing |
|-------------|-------------|---------------|------|---------|----------|
| Lost Valley | 27 May 2010 | NAD 27 | 13 | 313561 | 3948348 |
| Lost Valley | 5 June 2010 | NAD 27 | 13 | 313498 | 3948237 |
| Lost Valley | 5 June 2010 | NAD 27 | 13 | 310863 | 3946211 |
| Lost Valley | 5 June 2010 | NAD 27 | 13 | 310967 | 3946333 |
| San Ysidro | 28 May 2010 | NAD 27 | 13 | 337843 | 3935171 |
| San Ysidro | 4 June 2010 | NAD 27 | 13 | 338394 | 3935035 |

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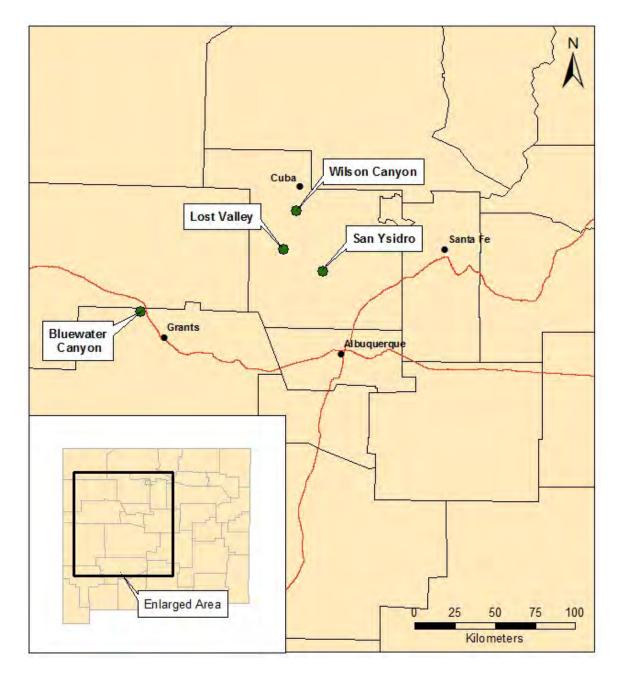


Figure 1. Location of Bluewater Canyon, Lost Valley, San Ysidro, and Wilson Canyon, New Mexico, where Hawks Aloft conducted Willow Flycatcher surveys in 2010.

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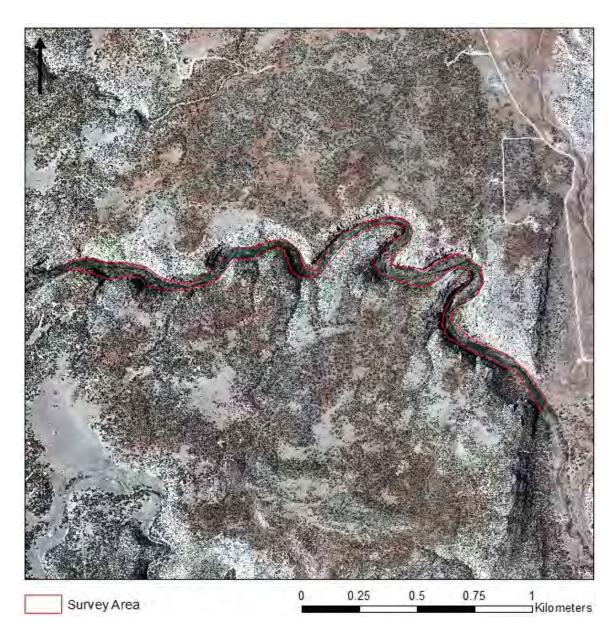


Figure 2. Willow Flycatcher survey route in Bluewater Canyon, Cibola County, New Mexico.

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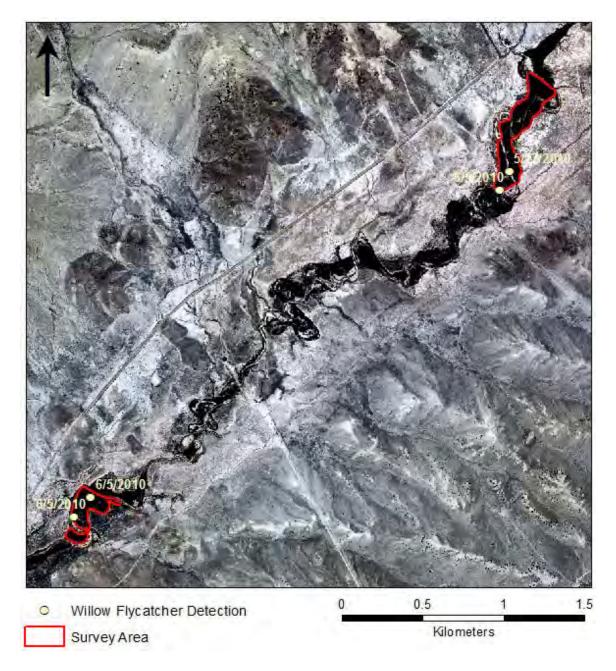


Figure 3. Willow Flycatcher survey area and 2010 Willow Flycatcher observations in Lost Valley, Sandoval County, New Mexico.

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Figure 4. Willow Flycatcher survey area and 2010 Willow Flycatcher observations in San Ysidro, Sandoval County, New Mexico.

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Figure 5. Willow Flycatcher survey area in Wilson Canyon, Sandoval County, New Mexico.

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Appendix 1. List of 59 bird species observed during Willow Flycatcher surveys at Bluewater Canyon (BC), Lost Valley (LV), San Ysidro (SY), and Wilson Canyon (WC), New Mexico in 2010. Species are listed in taxonomic order, based on the American Birding Association, Checklist 6.7.

| MallardAnas PlatyrhynchosXTurkey VultureCathartes auraXRed-tailed HawkButeo jamaicensisXWhite-winged DoveZenaida asiaticaXXMourning DoveZenaida macrouraXXXBlack-chinned HummingbirdStellula calliopeXXCalliope HummingbirdSelasphorus platycercusXXXCalliope HummingbirdSelasphorus platycercusXXXDowny WoodpeckerPiccides pubescensXXXNorthern FlickerColaptes auratusXXXWestern Wood-PeweeContopus sordidulusXXXWillow FlycatcherEmpidonax trailliiXXXGray FlycatcherEmpidonax wrightiiXXXBlack PhoebeSayornis sayaXXXSay's PhoebeSayornis sayaXXXCassin's KingbirdTyrannus vociferansXXWestern KingbirdTyrannus verticalisXXWestern KingbirdTyrannus verticalisXXVireo gilvusXXXPinyon JayGymnorhinus cyanocephalusXXCommon RavenCorvus coraxXXXViolet-green SwallowTachycineta thalassinaXXXCliff SwallowPetrochelidon pyrrhonotaXXXMountain ChickadeePoecile gambeliXXXJunipe | Species | Scientific Name | BC | LV | SY | WC |
|---|---------------------------|---------------------------|----|----|----|----|
| Red-tailed HawkButeo jamaicensisXWhite-winged DoveZenaida asiaticaXXMourning DoveZenaida macrouraXXXBlack-chinned HummingbirdArchilochus alexandriXXCalliope HummingbirdStellula calliopeXXBroad-tailed HummingbirdSelasphorus platycercusXXXDowny WoodpeckerPicoides pubescensXXXNorthern FlickerColaptes auratusXXXWestern Wood-PeweeContopus sordidulusXXXWillow FlycatcherEmpidonax trailliXXXGray FlycatcherEmpidonax wrightiiXXBlack PhoebeSayornis nigricansXXXSay's PhoebeSayornis sayaXXXCassin's KingbirdTyrannus vociferansXXXWestern KingbirdTyrannus vociferansXXXWarbling VireoVireo gilvusXXXPinyon JayGymnorhinus cyanocephalusXXXCommon RavenCorvus coraxXXXXViolet-green SwallowTachycineta thalassinaXXXCliff SwallowPetrochelidon pyrrhonotaXXXMountain ChickadeePoecile gambeliXXXJuniper TitmouseBaeolophus ridgwayiXXXWhite-breasted NuthatchSitta carolinensisXX <td>Mallard</td> <td>Anas Platyrhynchos</td> <td>X</td> <td></td> <td></td> <td></td> | Mallard | Anas Platyrhynchos | X | | | |
| White-winged DoveZenaida asiaticaXXMourning DoveZenaida macrouraXXXBlack-chinned HummingbirdArchilochus alexandriXXCalliope HummingbirdStellula calliopeXXBroad-tailed HummingbirdSelasphorus platycercusXXXDowny WoodpeckerPicoides pubescensXXXNorthern FlickerColaptes auratusXXXWestern Wood-PeweeContopus sordidulusXXXWillow FlycatcherEmpidonax trailliiXXXGray FlycatcherEmpidonax wrightiiXXBlack PhoebeSayornis nigricansXXSay's PhoebeSayornis sayaXXXCassin's KingbirdTyrannus vociferansXXXWestern KingbirdTyrannus verticalisXXWarbling VireoVireo gilvusXXXPinyon JayGymnorhinus cyanocephalusXXCommon RavenCorvus coraxXXXViolet-green SwallowTachycineta thalassinaXXXCliff SwallowPetrochelidon pyrrhonotaXXXMountain ChickadeePoecile gambeliXXXJuniper TitmouseBaeolophus ridgwayiXXXWhite-breasted NuthatchSitta carolinensisXXRock WrenCatherpes mexicanusXXWestern Bluebird <td>Turkey Vulture</td> <td>Cathartes aura</td> <td>X</td> <td></td> <td></td> <td></td> | Turkey Vulture | Cathartes aura | X | | | |
| Mourning DoveZenaida macrouraXXXBlack-chinned HummingbirdArchilochus alexandriXXCalliope HummingbirdStellula calliopeXBroad-tailed HummingbirdSelasphorus platycercusXXDowny WoodpeckerPicoides pubescensXXNorthern FlickerColaptes auratusXXXWestern Wood-PeweeContopus sordidulusXXXWillow FlycatcherEmpidonax trailliiXXXGray FlycatcherEmpidonax wrightiiXXBlack PhoebeSayornis nigricansXXXSay's PhoebeSayornis sayaXXXAsh-throated FlycatcherMyiarchus cinerascensXXXCassin's KingbirdTyrannus vociferansXXXWestern KingbirdTyrannus verticalisXXWarbling VireoVireo gilvusXXPinyon JayGymnorhinus cyanocephalusXXCommon RavenCorvus coraxXXXViolet-green SwallowTachycineta thalassinaXXXCliff SwallowPetrochelidon pyrrhonotaXXXMountain ChickadeePoecile gambeliXXXJuniper TitmouseBaeolophus ridgwayiXXWhite-breasted NuthatchSitta carolinensisXXRock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexican | Red-tailed Hawk | Buteo jamaicensis | X | | | |
| Black-chinned Hummingbird | White-winged Dove | Zenaida asiatica | X | | X | |
| Calliope Hummingbird Selasphorus platycercus X X X X X X X Downy Woodpecker Picoides pubescens X X X X X X X X X X X X X X X X X X X | Mourning Dove | Zenaida macroura | X | X | X | X |
| Broad-tailed Hummingbird Downy Woodpecker Picoides pubescens X X X Northern Flicker Colaptes auratus Western Wood-Pewee Contopus sordidulus X Willow Flycatcher Empidonax traillii Sayornis nigricans Say's Phoebe Sayornis saya Ash-throated Flycatcher Myiarchus cinerascens X Warbling Vireo Vireo gilvus Pinyon Jay Common Raven Corvus corax X X X X X X X X X X X X X | Black-chinned Hummingbird | Archilochus alexandri | | X | X | |
| Downy WoodpeckerPicoides pubescensXNorthern FlickerColaptes auratusXWestern Wood-PeweeContopus sordidulusXXWillow FlycatcherEmpidonax trailliiXXGray FlycatcherEmpidonax wrightiiXXBlack PhoebeSayornis nigricansXXSay's PhoebeSayornis sayaXXXAsh-throated FlycatcherMyiarchus cinerascensXXXCassin's KingbirdTyrannus vociferansXXWestern KingbirdTyrannus verticalisXXWarbling VireoVireo gilvusXXPinyon JayGymnorhinus cyanocephalusXXCommon RavenCorvus coraxXXXViolet-green SwallowTachycineta thalassinaXXXCliff SwallowPetrochelidon pyrrhonotaXXXMountain ChickadeePoecile gambeliXXJuniper TitmouseBaeolophus ridgwayiXXWhite-breasted NuthatchSitta carolinensisXXRock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexicanusXBewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Calliope Hummingbird | Stellula calliope | | | X | |
| Northern Flicker Colaptes auratus Western Wood-Pewee Contopus sordidulus X X X X Willow Flycatcher Empidonax traillii X X Say Flycatcher Empidonax wrightii Say ornis nigricans X Say's Phoebe Sayornis saya X Ash-throated Flycatcher Myiarchus cinerascens X Western Kingbird Tyrannus vociferans Warbling Vireo Vireo gilvus Pinyon Jay Common Raven Corvus corax X Violet-green Swallow Tachycineta thalassina X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi White-breasted Nuthatch Sitta carolinensis X N N N N N N N N N N N N | Broad-tailed Hummingbird | Selasphorus platycercus | X | X | | X |
| Western Wood-Pewee Contopus sordidulus X X X X Willow Flycatcher Empidonax traillii X X X Black Phoebe Sayornis nigricans Say's Phoebe Sayornis saya Ash-throated Flycatcher Myiarchus cinerascens X X X X Ash-throated Flycatcher Myiarchus cinerascens X X X X Western Kingbird Tyrannus vociferans X Warbling Vireo Vireo gilvus Pinyon Jay Common Raven Corvus corax Violet-green Swallow Tachycineta thalassina X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi White-breasted Nuthatch Sitta carolinensis X N Canyon Wren Catherpes mexicanus Sialia mexicana Mountain Bluebird Sialia currucoides X X X X X X X X X X X X X | Downy Woodpecker | Picoides pubescens | X | | | |
| Willow FlycatcherEmpidonax trailliiXXGray FlycatcherEmpidonax wrightiiXBlack PhoebeSayornis nigricansXSay's PhoebeSayornis sayaXXAsh-throated FlycatcherMyiarchus cinerascensXXCassin's KingbirdTyrannus vociferansXWestern KingbirdTyrannus verticalisXWarbling VireoVireo gilvusXPinyon JayGymnorhinus cyanocephalusXCommon RavenCorvus coraxXXViolet-green SwallowTachycineta thalassinaXXCliff SwallowPetrochelidon pyrrhonotaXXMountain ChickadeePoecile gambeliXXJuniper TitmouseBaeolophus ridgwayiXXWhite-breasted NuthatchSitta carolinensisXXRock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexicanusXXBewick's WrenThryomanes bewickiiXXMountain BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Northern Flicker | Colaptes auratus | | X | | |
| Gray Flycatcher Black Phoebe Sayornis nigricans X Say's Phoebe Sayornis saya Ash-throated Flycatcher Myiarchus cinerascens X X X X X X X X X X X X X X X X X X | Western Wood-Pewee | Contopus sordidulus | X | X | X | X |
| Black Phoebe Sayornis nigricans X Say's Phoebe Sayornis saya X Ash-throated Flycatcher Myiarchus cinerascens X X X X X Cassin's Kingbird Tyrannus vociferans X Western Kingbird Tyrannus verticalis X Warbling Vireo Vireo gilvus Pinyon Jay Gymnorhinus cyanocephalus X Common Raven Corvus corax X X Violet-green Swallow Tachycineta thalassina X Cliff Swallow Petrochelidon pyrrhonota X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi X Rock Wren Salpinctes obsoletus X Canyon Wren Catherpes mexicanus X Western Bluebird Sialia mexicana X Mountain Bluebird Sialia currucoides X X X X X X X X X X X X X X X X X X X | Willow Flycatcher | Empidonax traillii | | X | X | |
| Say's Phoebe Sayornis saya Ash-throated Flycatcher Myiarchus cinerascens X X X X X X Cassin's Kingbird Tyrannus vociferans X Western Kingbird Tyrannus verticalis X Warbling Vireo Vireo gilvus Finyon Jay Common Raven Corvus corax X Violet-green Swallow Tachycineta thalassina X Cliff Swallow Petrochelidon pyrrhonota X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi X White-breasted Nuthatch Sitta carolinensis X Canyon Wren Catherpes mexicanus Bewick's Wren Thryomanes bewickii X X X X X X X X X X X X | Gray Flycatcher | Empidonax wrightii | | X | | |
| Ash-throated Flycatcher Cassin's Kingbird Tyrannus vociferans Western Kingbird Tyrannus verticalis Warbling Vireo Vireo gilvus Finyon Jay Common Raven Corvus corax Violet-green Swallow Tachycineta thalassina Cliff Swallow Petrochelidon pyrrhonota Myiarchus cinerascens X X X X X X Yiolet-green Swallow Petrochelidon pyrrhonota X X X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi White-breasted Nuthatch Sitta carolinensis X Rock Wren Salpinctes obsoletus X X Western Bluebird Sialia mexicana Mountain Bluebird Sialia currucoides X X X X X X X X X X X X X | Black Phoebe | Sayornis nigricans | X | | | |
| Cassin's Kingbird Western Kingbird Tyrannus verticalis Warbling Vireo Vireo gilvus Common Raven Corvus corax Violet-green Swallow Cliff Swallow Petrochelidon pyrrhonota Mountain Chickadee Baeolophus ridgwayi White-breasted Nuthatch Sitta carolinensis Rock Wren Catherpes mexicanus Bewick's Wren Thryomanes bewickii X X X X X X X X X X X X | Say's Phoebe | Sayornis saya | X | | | X |
| Western KingbirdTyrannus verticalisXWarbling VireoVireo gilvusXPinyon JayGymnorhinus cyanocephalusXCommon RavenCorvus coraxXXXViolet-green SwallowTachycineta thalassinaXXCliff SwallowPetrochelidon pyrrhonotaXXMountain ChickadeePoecile gambeliXJuniper TitmouseBaeolophus ridgwayiXWhite-breasted NuthatchSitta carolinensisXRock WrenSalpinctes obsoletusXCanyon WrenCatherpes mexicanusXBewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Ash-throated Flycatcher | Myiarchus cinerascens | X | X | X | X |
| Warbling Vireo Vireo gilvus Pinyon Jay Gymnorhinus cyanocephalus X Common Raven Corvus corax X X X Violet-green Swallow Petrochelidon pyrrhonota X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi White-breasted Nuthatch Sitta carolinensis X Rock Wren Salpinctes obsoletus X Western Bluebird Sialia mexicana X X X X X X X X X X X X X | Cassin's Kingbird | Tyrannus vociferans | X | | | |
| Pinyon Jay Common Raven Corvus corax X X X X Violet-green Swallow Tachycineta thalassina X Cliff Swallow Petrochelidon pyrrhonota X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi White-breasted Nuthatch Sitta carolinensis X Rock Wren Salpinctes obsoletus Canyon Wren Catherpes mexicanus Bewick's Wren Thryomanes bewickii X X X X X X X X X X X X | Western Kingbird | Tyrannus verticalis | | X | | |
| Common Raven Corvus corax X X X Violet-green Swallow Tachycineta thalassina X X Cliff Swallow Petrochelidon pyrrhonota X X Mountain Chickadee Poecile gambeli Juniper Titmouse Baeolophus ridgwayi X White-breasted Nuthatch Sitta carolinensis X Rock Wren Salpinctes obsoletus X Canyon Wren Catherpes mexicanus X Bewick's Wren Thryomanes bewickii X X Mountain Bluebird Sialia mexicana X Mountain Bluebird Sialia currucoides | Warbling Vireo | Vireo gilvus | | | | X |
| Violet-green SwallowTachycineta thalassinaXXCliff SwallowPetrochelidon pyrrhonotaXXXMountain ChickadeePoecile gambeliXXJuniper TitmouseBaeolophus ridgwayiXXWhite-breasted NuthatchSitta carolinensisXXRock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexicanusXXBewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Pinyon Jay | Gymnorhinus cyanocephalus | X | | | |
| Cliff Swallow Petrochelidon pyrrhonota X X X X Mountain Chickadee Poecile gambeli X Juniper Titmouse Baeolophus ridgwayi X X White-breasted Nuthatch Sitta carolinensis X Rock Wren Salpinctes obsoletus X X Canyon Wren Catherpes mexicanus X Bewick's Wren Thryomanes bewickii X X X Western Bluebird Sialia mexicana X Mountain Bluebird Sialia currucoides X | Common Raven | Corvus corax | X | X | X | X |
| Mountain ChickadeePoecile gambeliXJuniper TitmouseBaeolophus ridgwayiXWhite-breasted NuthatchSitta carolinensisXRock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexicanusXBewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Violet-green Swallow | Tachycineta thalassina | X | | | X |
| Juniper TitmouseBaeolophus ridgwayiXWhite-breasted NuthatchSitta carolinensisXRock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexicanusXBewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Cliff Swallow | Petrochelidon pyrrhonota | X | | X | X |
| White-breasted Nuthatch Sitta carolinensis X Rock Wren Salpinctes obsoletus X X Canyon Wren Catherpes mexicanus X Bewick's Wren Thryomanes bewickii X X X Mountain Bluebird Sialia mexicana X X X | Mountain Chickadee | Poecile gambeli | | | X | |
| Rock WrenSalpinctes obsoletusXXCanyon WrenCatherpes mexicanusXBewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Juniper Titmouse | Baeolophus ridgwayi | | | X | |
| Canyon Wren Catherpes mexicanus X Bewick's Wren Thryomanes bewickii X X Western Bluebird Sialia mexicana X Mountain Bluebird Sialia currucoides X | White-breasted Nuthatch | Sitta carolinensis | X | | | |
| Bewick's WrenThryomanes bewickiiXXWestern BluebirdSialia mexicanaXMountain BluebirdSialia currucoidesX | Rock Wren | Salpinctes obsoletus | X | X | | |
| Western Bluebird Sialia mexicana X Mountain Bluebird Sialia currucoides X | Canyon Wren | Catherpes mexicanus | X | | | |
| Mountain Bluebird Sialia currucoides X | Bewick's Wren | Thryomanes bewickii | | X | | X |
| | Western Bluebird | Sialia mexicana | X | | | |
| American Robin Turdud migratorius X | Mountain Bluebird | Sialia currucoides | X | | | |
| | American Robin | Turdud migratorius | X | | | |

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|-------------------|----------------|-----------------------|----------------|---------------|
| | | | | |

| Species | Scientific Name | BC | LV | SY | WC |
|------------------------|---------------------------|----|----|----|----|
| Gray Catbird | Dumetella carolinensis | | | X | |
| Northern Mockingbird | Mimus polyglottos | X | X | X | X |
| Curve-billed Thrasher | Toxostoma curvirostre | | | X | |
| Crissal Thrasher | Toxostoma crissale | | X | | |
| Virginia's Warbler | Vermivora virginiae | X | | | |
| Common Yellowthroat | Geothlypis trichas | | | X | |
| Yellow-breasted Chat | Icteria virens | X | X | X | X |
| Green-tailed Towhee | Pipilo chlorurus | | | | X |
| Spotted Towhee | Pipilo maculatus | X | X | X | X |
| Rufous-crowned Sparrow | Aimophila ruficeps | | | | X |
| Chipping Sparrow | Spizella passerina | | | X | |
| Brewer's Sparrow | Spizella breweri | | | | X |
| Lark Sparrow | Chondestes grammacus | | | X | X |
| Black-throated Sparrow | Amphispiza bilineata | | X | | |
| Vesper Sparrow | Pooecetes gramineus | | | | X |
| Song Sparrow | Melospiza melodia | | | | X |
| White-crowned Sparrow | Zonotrichia leucophrys | | | | X |
| Black-headed Grosbeak | Pheucticus melanocephalus | X | X | X | |
| Blue Grosbeak | Guiraca caerulea | X | X | X | X |
| Lazuli Bunting | Passerina amoena | | | X | X |
| Red-winged Blackbird | Agelaius phoeniceus | | | X | X |
| Western Meadowlark | Sturnella neglecta | | | X | X |
| Brown-headed Cowbird | Molothrus ater | X | X | X | X |
| Bullock's Oriole | Icterus bullockii | X | X | | X |
| House Finch | Carpodacus mexicanus | X | | X | X |
| Pine Siskin | Carduelis pinus | | | | X |
| Lesser Goldfinch | Carduelis psaltria | X | | X | X |

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Appendix 2. Data forms from 2010 Willow Flycatcher surveys in Bluewater Canyon, Lost Valley, San Ysidro, and Wilson Canyon, New Mexico.

| Site Name_ USGS Quad | | | - | | | State NM Count Elevation 2.1 | y Ci | bol | | ters) |
|--|--------------------------------|-----------------------------|-------------------------------------|---------------------------------------|--|--|------------------------------|---|--|------------------------------|
| Creek, River | r. Wetland, o | or Lake N | lame E | luewa | ter Cree | Elevation 21 | | _ | (inc | (CIS) |
| | | | | | | ightings attached (as requ | ired)? | 1 | Yes_\ 1 | Vo |
| 700 | Sto | p: E O | 16861 | D | N 3909 | TOT UTM | Zone | 125 | (See instru | |
| 11 surve | y coordinate | | | | | es for each survey in comm nation on back of this | | | n back of th | s page. |
| Survey # Observer(s) (Full Name) | Date (m/d/y) Survey time | Number of Adult WIFLs | Estimate d Number of Pairs | Estimated Number of Territories | Nest(s) Found? Y or N If Yes, number of nests | Comments (e.g., bird behavior, evidence of pairs or breeding, potential threats [livestock, cowbirds, Diorhabda spp.]). If Diorhabda found, contact USFWS and State WIFL coordinator | GPS C (this is individ | oordinate an option uals, pair rvey). Ir | es for WIFL Det nal column for c rs, or groups of include additions | locumenting birds found o |
| Survey # 1 | Date | | | | | multiple beaver | # Birds | Sex | UTM E | UTMN |
| bserver(s) | 5/27/10 Start | | | | | ponds, high | | | | |
| ellermueller | 0550 | 0 | 0 | 0 | N | water flow. | - | | | |
| | Stop 0730 Total hrs 1:40 | | 0 | | 2 | No BHCO detections. | | | | |
| urvey # 2 | Date | | | | | water lower | # Birds | Sex | UTM E | UTM N |
|)bserver(s) | 6/10/10 | | | | | than during | | | | |
| ellermueller | Start 0624 | 0 | 0 | 0 | 2 | survey #1. | | | | |
| LEHET MUELLEY | Stop 816 | 0 | 0 | | 3.3 | IBHCO | | \vdash | | |
| | Total hrs1:52 | | | | | detected. | | | | |
| Survey # 3 | Date . | - | | - | | Water Flowing | # Birds | Sex | UTM E | UTM N |
| Observer(s) | 6 28 10 Start | | P. 11 | | | throughout. | | | | - |
| cellermuelles | 0615 | 0 | 0 | 0 | N | No BHCO | - | | _ | |
| | 0915 | | | 1 | | detections. | | | | |
| | Total hrs 3:00 | | - | | | | | | | |
| Survey # 4 Observer(s) | Date 7/7/10 | | | | 1 | Water Flow | # Birds | Sex | UTME | UTM N |
| 3. | Start | | - | | | higher than | | | | |
| | 0607 Stop | 0 | 0 | 0 | N | previous survey. | | | | |
| | 0821 Total hrs2:14 | | - | 1111 | | No BHCD | | | | |
| | Total hrs4-17 | | | | | detections. | | | 2272 | |
| Survey # 5 Observer(s) | Date | | | | - | Water still | # Birds | Sex | UTM E | UTM N |
| R. | 7 13 10 Start | | -5. | 100 | 5. | high, continued | - | | | |
| sellermueller | O6OI Stop | 0 | 0 | 0 | N | beaver activity. | | | | |
| | OBII Total hrs Z: K | | | | | No BHCO detections. | | | | |
| Overall Site Sur | | 10.00 | 100 | 1122 | | | | | | |
| otals do not equal ach column. Includes esident adults. Do nigrants, nestlings, | ie only not include | Total Adult Residents | Total Pairs | Total Territories | Total Nests | Were any Willow Flycatch | hers co | lor-ban | ded? Yes_ | No V |
| edglings. Se careful not to do adividuals. | uble count | 0 | 0 | 0 | 0 | If yes, report color combin section on back of form ar | | | | |
| otal Survey Hrs 1 | 0:56 | - | - | 1.7 | | | | | | |

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| Panarting | Individual Tres | or Fetz | | | Pho | ne# 505- | 828-9455 |
|----------------------|---|----------------------------------|---------------------------------------|---|---------------------------|------------------------|---|
| Affiliation | Howks Alo | Ft. Inc. | | | | | @ howksaloft.org |
| Site Name | Bluewater | | | | Date | e Report Con | pleted 8 14 10 |
| Did you ve | ite surveyed in a perify that this site is different, who | name is consiste | ent with that use | ed in previous yea | | | Not Applicable |
| f site was | surveyed last yea | r, did you surve | y the same gene | eral area this year' his site this year? | Yes_Y | No No | If no, summarize below. If no, summarize below. |
| Manageme | ent Authority for S fanagement Entity | Survey Area: y or Owner (e.g. | Federal V I | Municipal/County al Forest) Bure | Sta | teTrib | pal Private |
| ength of | area surveyed: | 3. 2(km |) | | | | |
| egetation | Characteristics: | Check (only one | c) category that | best describes the | predomina | ant tree/shrub | foliar layer at this site: |
| < N | lative broadleaf p | lants (entirely or | r almost entirely | y, > 90% native) | | | |
| | lixed native and | exotic plants (me | ostly native, 50 | - 90% native) | | | |
| N | lixed native and | exotic plants (mo | ostly exotic, 50 | - 90% exotic) | | | |
| | | | | ly, > 90% exotic) | | | |
| dentify the | e 2-3 predominan | t tree/shrub spec | monti, Ju | dominance. Use s | cientific na | ames. | |
| verage h | eight of canopy (I | Do not include a | range): | 7 | | (meters) | |
| Comments Catures. | hotos of the interior (such as start and Attach additional) | or of the patch, e | exterior of the passes of survey area | atch, and overall si | te. Describ g surveys, | e any unique | of any detected WIFLs or thei habitat features in Comments visits to sites, unique habitat |
| | | | | | | | |
| amitam C | Summary Table I | Provide the follo | wing informati | on for each verifie | d territory | at your site | |
| | | | | , | | | |
| Perritory Number | All Dates Detected | UTM E | UTM N | Pair Confirmed? Y or N | Nest Found? Y or N | Territ (e.g., vocal | ion of How You Confirmed ory and Breeding Status ization type, pair interactions ing attempts, behavior) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | 1 | | 7 | | | | |
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| | | | l . | 1 1 | | | |

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Willow Flycatcher (WIFL) Survey and Detection Form (revised April 2010)

| USGS Ouad | Lost Vo | in Lui | 5 | | | State NM Count Elevation 187 | | na | | eters) | |
|---|---|-----------------------------|-------------------------------------|---------------------------------------|--|--|------------|-----------------------------|--|-------------------------------|--|
| Creek, Rive Is copy | of USGS me | r Lake N ap marke | ame_R d with si | arvey area | and WIFL's | ightings attached (as requi | | | | No | |
| | rdinates: Sta | m F 3 1 | 083 | 2 | N 3948 | 074 UTM | Zone 1 | 35 | 27(See instru | | |
| If surve | y coordinate | s change ** F | ill in a | n visits, er dditiona | ter coordinate site inform | es for each survey in comm mation on back of this | page | etion ** | on back of th | is page. | |
| Survey # Observer(s) (Full Name) | Date (m/d/y) Survey time | Number of Adult WIFLs | Estimate d Number of Pairs | Estimated Number of Territories | Nest(s) Found? Y or N If Yes, number of nests | Comments (e.g. bird behavior, avidence of pairs or breeding; potential threats [livestock, cowbirds, Plorhabda spp.]). If Diorhabda found, contact USFWs and State WIFL coordinator. | (this is a | an opti ials, p rvey) | ates for WIFL De ional column for airs, or groups of Include addition | documenting birds found on | |
| Survey # 1 | Date , | | | | | WIFL calling From | # Birds | Sex | UTM E | UTM N | |
| Observer(s) Go. Garber | 5/21/10 Start 0.24 Stop 0946 Total hrs2:22 | Ţ | 0 | 0 | 7 | across river relative to provided UTM'S. 4 BHCO detected. | 1 | u | 313561 | 3949348 | |
| Survey # 2 | Total nisa. | | | | | 101100 | # Birds | Sex | UTME | UTM N | |
| Observer(s) | Date 615 10 | T - Y | | | 1.5 | detected. | 1 | u | 313498 | 3948237 | |
| G. Garber | Start | 2 | 0 | 0 | 2 | detected. | 1 | u | 310863 | 3946211 | |
| | 0558 Stop 0834 Total hrs2:34 | 3 | 0 | | 2 | | ı | u | 310967 | 3946333 | |
| Survey # 3 Observer(s) G. Garber | Date 6/23/10 Start OGOI Stop OGOI Total hrs 3 | 0 | 0 | 0 | 2 | I BHCO detected. | Birds | Sex | UTME | UTM N | |
| Survey # 4 Observer(s) G. Garber | Date 7[7]10 Start 0612 Stop 0912 Total hrs 3 | 0 | 0 | 0 | 7 | IBHCO detected. | # Birds | Sex | UTME | UTM N | |
| Survey # 5 | | _ | | | | 2 BHCO | # Birds | Sex | UTME | UTM N | |
| Observer(s) G. Garber | Date 7/15/10 Start 0636 Stop 0910 Total hrs2:34 | 0 | 0 | 0 | 2 | detected. | | | | | |
| Overall Site Sur Totals do not equal each column Inclu- resident adults Do migrants, nestlings, | the sum of de only not include | Total Adult Residents | Total Pairs | Total Territories | Total Nests | Were any Willow Flycate | | | | | |
| fledglings Be careful not to do individuals. | | 0 | 0 | 0 | 0 | If yes, report color combination(s) in the comments section on back of form and report to USFWS. | | | | | |
| Total Survey Hrs 1 | | | | | | | | | | | |
| | ndividual Ti d Wildlife Se | rvice Per | mit # T | | | Date Report Completed State Wildlife Agency F by September 1". Retain | ermit # | 14 | | | |

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| | III I I I | evor Fetz | | | Phone # | 505-8 | 120 | 1 51 |
|---|--|---|---|--|---|--|--------------------------------|---|
| Affiliation | Howks Alo | | | | E-mail | +Fetze | Ohas | oks aloft.org |
| Site Name | Lost Valley | | | | Date Re | eport Comple | eted_ | 8114/10 |
| Did you ve | ite surveyed in a crify that this site e is different, wh | name is consiste | ent with that use | ed in previous yea | rs? Yes 🗸 | No | Not A | Applicable |
| f site was | surveyed last yes | ar, did you surve | y the same gene | eral area this year | 7 Yes_ | No | If no. | summarize below. |
| | | | | | | | | |
| Manageme Name of M | ent Authority for lanagement Entit | Survey Area: ty or Owner (e.g | Federal V., Tonto Nationa | Municipal/County al Forest) Bure | State_ au of Lan | d Manag | yeme | Private |
| ength of a | area surveyed: _ | 2(km |) | | | | | |
| Vegetation | Characteristics: | Check (only one | e) category that | best describes the | predominant t | ree/shrub fol | liar lay | er at this site: |
| N | lative broadleaf p | olants (entirely o | r almost entirely | y, > 90% native) | | | | |
| N | lixed native and | exotic plants (m | ostly native, 50 | - 90% native) | | | | |
| V N | fixed native and | exotic plants (m | ostly exotic, 50 | - 90% exotic) | | | | |
| E | xotic/introduced | plants (entirely | or almost entire | ly, > 90% exotic) | | | | |
| dentify the | e 2-3 predominar | tifolia, Ta | nacix ch | dominance. Use: | scientific name | s. monti | | |
| _ | - | | | | | | | |
| Attach the | eight of canopy (| py of USGS qua | d/topographical | map (REQUIRE | D) of survey ar | ea, outlining | survey | site and location of |
| Attach the VIFL dete ests; 3) ph | following: 1) co- ections; 2) sketch notos of the interi (such as start an | py of USGS qua- or aerial photo s for of the patch, of d end coordinate sheets if necessi | d/topographical showing site local exterior of the parties of survey area | map (REQUIREI ation, patch shape atch, and overall s a if changed amon | D) of survey are, survey route, ite. Describe are | ea, outlining location of a ny unique hal plemental vi | ny dete bitat fe sits to | ected WIFLs or their atures in Comments sites, unique habitat |
| Attach the WIFL detenests; 3) ph | following: 1) co- ections; 2) sketch notos of the interi (such as start an | py of USGS qua- or aerial photo s for of the patch, of d end coordinate sheets if necessi | d/topographical showing site local exterior of the parties of survey area | map (REQUIREI ation, patch shape atch, and overall s | D) of survey are, survey route, ite. Describe are | ea, outlining location of a ny unique hal plemental vi | ny dete bitat fe sits to | ected WIFLs or their atures in Comments sites, unique habitat |
| Attach the WIFL dete lests; 3) ph | following: 1) co- ections; 2) sketch notos of the interi (such as start an | py of USGS qua- or aerial photo s for of the patch, of d end coordinate sheets if necessi | d/topographical showing site local exterior of the parties of survey area | map (REQUIREI ation, patch shape atch, and overall s a if changed amon | D) of survey are, survey route, ite. Describe are | ea, outlining location of a ny unique hal plemental vi | ny dete bitat fe sits to | ected WIFLs or their atures in Comments sites, unique habitat |
| Attach the WIFL dete lests; 3) ph Comments eatures. A | following: 1) coperations; 2) sketch notes of the interior (such as start an Attach additional a bottomic does not see a does | py of USGS qua or acrial photo s for of the patch, e d end coordinate sheets if necessi and arroyo of Fully rep | d/topographical thowing site local exterior of the particles ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch ware of half | D) of survey are, survey route, ite. Describe are ag surveys, sup or all the billet surveys. | ea, outlining location of a ny unique hal plemental vi | ny dete bitat fe sits to | ected WIFLs or their atures in Comments sites, unique habitat |
| Attach the WIFL dete dests; 3) photoments eatures. A This is survey | following: 1) coperitions; 2) sketch notos of the interior (such as start an Attach additional a bottomic document of the such as a bottomic document of the | py of USGS qua or aerial photo s for of the patch, e and end coordinate sheets if necessi and arroyo by Fully rep | d/topographical thowing site loci exterior of the pr es of survey area ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch was of hall on for each verific | D) of survey are, survey route, ite. Describe are ng surveys, sup biddh, the bidat survey ed territory at y | ea, outlining location of a sy unique hal plemental vi- | ny dete bitat fe sits to | ected WIFLs or their atures in Comments sites, unique habitat |
| citach the VIFL dete ests; 3) photoments eatures. A This is survey | following: 1) coperations; 2) sketch notes of the interior (such as start an Attach additional a bottomic does not see a does | py of USGS qua or acrial photo s for of the patch, e d end coordinate sheets if necessi and arroyo of Fully rep | d/topographical thowing site local exterior of the particles ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch ware of half | D) of survey are, survey route, ite. Describe are ite surveys, supported that surveys are the surveys are territory at your Nest Found? | ea, outlining location of a ny unique hal plemental visue and the location of a normal | of Ho | ected WIFLs or their atures in Comments sites, unique habitat |
| omments atures. A This is | following: 1) coperations; 2) sketch notos of the interior (such as start an Attach additional a bottom less a bot | py of USGS qua or aerial photo s for of the patch, e and end coordinate sheets if necessi and arroyo by Fully rep | d/topographical thowing site loci exterior of the pr es of survey area ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch w area of hal on for each verific Pair Confirmed? | D) of survey are, survey route, ite. Describe are ite surveys, supported that surveys are the surveys are territory at your Nest Found? | ea, outlining location of a ny unique hal plemental visue and the location of a normal | of Ho | w You Confirmed Breeding Status pe, pair interactions, |
| Attach the VIFL dete ests; 3) photoments eatures. A This is survey | following: 1) coperations; 2) sketch notos of the interior (such as start an Attach additional a bottom less a bot | py of USGS qua or aerial photo s for of the patch, e and end coordinate sheets if necessi and arroyo by Fully rep | d/topographical thowing site loci exterior of the pr es of survey area ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch w area of hal on for each verific Pair Confirmed? | D) of survey are, survey route, ite. Describe are ite surveys, supported that surveys are the surveys are territory at your Nest Found? | ea, outlining location of a ny unique hal plemental visue and the location of a normal | of Ho | w You Confirmed Breeding Status pe, pair interactions, |
| Attach the VIFL dete ests; 3) photoments eatures. A This is survey | following: 1) coperations; 2) sketch notos of the interior (such as start an Attach additional a bottom less a bot | py of USGS qua or aerial photo s for of the patch, e and end coordinate sheets if necessi and arroyo by Fully rep | d/topographical thowing site loci exterior of the pr es of survey area ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch w area of hal on for each verific Pair Confirmed? | D) of survey are, survey route, ite. Describe are ite surveys, supported that surveys are territory at your Nest Found? | ea, outlining location of a ny unique hal plemental visue and the location of a normal | of Ho | w You Confirmed Breeding Status pe, pair interactions, |
| Attach the WIFL dete wife Leasts; 3) photoments catures. A This is survey | following: 1) coperations; 2) sketch notos of the interior (such as start an Attach additional a bottom less a bot | py of USGS qua or aerial photo s for of the patch, e and end coordinate sheets if necessi and arroyo by Fully rep | d/topographical thowing site loci exterior of the pr es of survey area ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch w area of hal on for each verific Pair Confirmed? | D) of survey are, survey route, ite. Describe are ite surveys, supported that surveys are territory at your Nest Found? | ea, outlining location of a ny unique hal plemental visue and the location of a normal | of Ho | w You Confirmed Breeding Status pe, pair interactions, |
| Attach the WIFL dete lests; 3) ph Comments catures. A | following: 1) coperations; 2) sketch notos of the interior (such as start an Attach additional a bottom less a bot | py of USGS qua or aerial photo s for of the patch, e and end coordinate sheets if necessi and arroyo by Fully rep | d/topographical thowing site loci exterior of the pr es of survey area ary. Because | map (REQUIREI ation, patch shape atch, and overall s a if changed amon a of patch w area of hal on for each verific Pair Confirmed? | D) of survey are, survey route, ite. Describe are ite surveys, supported that surveys are territory at your Nest Found? | ea, outlining location of a ny unique hal plemental visue and the location of a normal | of Ho | w You Confirmed Breeding Status pe, pair interactions, |

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Willow Flycatcher (WIFL) Survey and Detection Form (revised April 2010)

| Creek, Rive | Name _5 | or Lake N | ame F | lio Sa | lado | State NM Count Elevation 162 | | | | 07.5 |
|---|---|-----------------------------|-------------------------------------|---------------------------------------|--|--|---------------------|--------------------------|--|------------------------------|
| Is copy | of USGS m | ap marke | d with s | urvey area | and WIFL s | ightings attached (as requ | ired)? | | Yes | Va |
| | rdinates: Sta Sta ey coordinate | op: E O | d between | n visits, er | N 3934 N 3935 hter coordinat | 182 UTM es for each survey in comm | Zone _ nents se | ction | | |
| | | ** F | ill in a | dditiona | site inforn | nation on back of this | page | 市会 | | |
| Survey # Observer(s) (Full Name) | Date (m/d/y) Survey time | Number of Adult WIFLs | Estimate d Number of Pairs | Estimated Number of Territories | Nest(s) Found? Y or N If Yes, number of nests | Comments (e.g., bird behavior, evidence of pairs or breeding, potential threats [livestock, cowbirds, Diorhabda spp.] If Diorhabda found, contact USFWS and State WIFL coordinator | (this is individ | an opti uals, purvey) | ttes for WIFL Det conaï column for d airs, or groups of l Include additiona | ocumenting birds found on |
| Survey # 1 | Date | | | | | marsh wet: | # Birds | Sex | UTME | UTM N |
| Observer(s) G. Garber | Date 5/28/10 Start O602 Stop 0722 Total hrs1:20 | t = | 0 | 0 | 2 | 3 BHCD defected. Vocal response From WIFL. | 1 | u | 0337843 | 3935171 |
| Survey # 2 | - | | | | | | # Birds | Sex | UTME | UTMN |
| Observer(s) | G 4 10 | | | | | marsh wet. | Y | ц | 0338.394 | 3935035 |
| G. Garber | Start 0610 Stop 0724 Total hrs 1:14 | 1 | 0 | 0 | 2 | Vocal response From WIFL: 8BHCD detected. | | | | |
| Survey # 3 Observer(s) Gr. Garber | Date 6/22/10 Start 0600 Stop 0710 Total hrs [:10 | 0 | 0 | 0 | 7 | Marshdry. 5 BHCO detected. | # Birds | Sec | UTM E | UTM.N |
| Survey # 4 Observer(s) | Date 7 19 10 | | | | | Marsh dry. | # Birds | Sex | UTME | UTM N |
| G.Garber | Start O602 Stop O708 Total hrs 1:06 | 0 | 0 | 0 | 7 | 1 BHCO detected. | | | | |
| Survey # 5 Observer(s) | Date | | | | | marsh dry. | # Birds | Sex | UTME | L/TM N |
| G. Garber | 7 16 10 Start 0604 Stop 0715 Total hrs :11 | 0 | 0 | 0 | 2 | 3 BHCO detected. | | | | |
| Overall Site Sur Totals do not equal each column Inclus resident adults Do migrants, nestlings, | the sum of le only not include | Total Adult Residents | Total Pairs | Total Territories | Total Nests | Were any Willow Flycate | hers co | lor-ba | inded? Yes_ | No 🗸 |
| fledglings Be careful not to de individuals Total Survey Hrs | 0.00 | 0 | 0 | 0 | 0 | If yes, report color combin section on back of form ar | nation(s id repo | in to l | he comments JSFWS | |
| | ndividual | | - 1 | | | Date Report Completed | 101 | -1 | - | |

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| Affiliation 11 | | | | | | | |
|--|---|--|--|---|--|--|--|
| eporting Individual Trevor Fetz ffiliation Hawks Aloft, Inc. | | | | E-mail tretz & hawksolott. Org | | | |
| te Name San Y | sidro | | | Date | Report Complete | d 8 14 10 | |
| as this site surveyed | in a previous year? | es No | Unknown | 0.00 | - N | Tex A sultimately | |
| id you verify that thi | s site name is consiste | ent with that use | d in previous ye | ars? Yes | No | Not Applicable | |
| site name is differer | nt, what name(s) was u ast year, did you surve | sed in the past | aral area this year | v Ves | No. If | no, summarize below. | |
| id you survey the sai | me general area during | g each visit to the | his site this year? | Yes V | No If | no, summarize below. | |
| fanagement Authorit | y for Survey Area: Entity or Owner (e.g. | Federal V | Municipal/Count al Forest) Bu | y State | Land Me | Private_ | |
| ength of area survey | ed: (km) |) | | | | | |
| egetation Characteri | stics: Check (only one |) category that | best describes th | e predominar | t tree/shrub folia | r layer at this site: | |
| Native broad | lleaf plants (entirely or | almost entirely | y, > 90% native) | | | | |
| Mixed native | e and exotic plants (mo | ostly native, 50 | - 90% native) | | | | |
| | and exotic plants (mo | | | | | | |
| - Y - A - W | duced plants (entirely o | | | | | | |
| lentify the 2-3 predor | minant tree/shrub spec | ies in order of | dominance. Use | scientific nar | nes. | | |
| claeagnus ai | ngustifolia, T | amarik C | inensis, i | opuus r | EMONII | | |
| verage height of can | opy (Do not include a | range): | 6 | | (meters) | | |
| /IFI. detections: 2) sl | ketch or aerial photo st | nowing site loca | ation, patch shap | e, survey rout | e, location of any | detected WIFLs or their | |
| /IFL detections; 2) sless; 3) photos of the omments (such as stratures. Attach addit | ketch or aerial photo sl interior of the patch, e art and end coordinate ional sheets if necessa | nowing site loc exterior of the po s of survey area ry. | ation, patch shap atch, and overall a if changed amo | e, survey rout site. Describe ng surveys, s | e, location of any any unique habit upplemental visit | rivey site and location of detected WIFLs or their at features in Comments is to sites, unique habitat | |
| VIFL detections; 2) slests; 3) photos of the comments (such as streatures. Attach addit | ketch or aerial photo si interior of the patch, e art and end coordinate ional sheets if necessa then of non-vo | nowing site locaterior of the particular sof survey area by. calizing E wing information | ation, patch shap atch, and overall a if changed amo mPID duris | e, survey roul site. Describe ing surveys, s ag First s | e, location of any any unique habit upplemental visit urvey (0333 c | detected WIFLs or their at features in Comments is to sites, unique habital | |
| TFL detections; 2) sists; 3) photos of the comments (such as statures. Attach addit is all observations of the comments of the | interior of the patch, eart and end coordinate ional sheets if necessation of non-voluble. Provide the folloes UTM E | nowing site loc exterior of the po s of survey area ry. | ation, patch shap atch, and overall a if changed amo | e, survey rout site. Describe ng surveys, s | Lyour site. Description of any unique habit Lyour site. Description o Territory a (e.g., vocalization | detected WIFLs or their at features in Comments is to sites, unique habitants to sites, unique habitants is to sites in the | |
| IFL detections; 2) sists; 3) photos of the somments (such as statures. Attach additional observations) and observations Summary Tarritory Summary Tarritory All Date | interior of the patch, eart and end coordinate ional sheets if necessation of non-voluble. Provide the folloes UTM E | nowing site locaterior of the particular sof survey area by. calizing E wing information | ation, patch shap atch, and overall a if changed amo mPID duri on for each verif Pair Confirmed? | e, survey roul site. Describe ing surveys, s g First s ied territory a Nest Found? | Lyour site. Description of any unique habit Lyour site. Description o Territory a (e.g., vocalization | r detected WIFLs or the at features in Comments to sites, unique habita to sites to sites, unique habita to sites to sites unique habita to sites to sites to sites to sites to sites to site sites to sites to sites to site sites to sit | |
| IFL detections; 2) sists; 3) photos of the comments (such as statures. Attach addit is a been been been been been been been be | interior of the patch, eart and end coordinate ional sheets if necessation of non-voluble. Provide the folloes UTM E | nowing site locaterior of the particular sof survey area by. calizing E wing information | ation, patch shap atch, and overall a if changed amo mPID duri on for each verif Pair Confirmed? | e, survey roul site. Describe ing surveys, s g First s ied territory a Nest Found? | Lyour site. Description of any unique habit Lyour site. Description o Territory a (e.g., vocalization | r detected WIFLs or their at features in Comments is to sites, unique habital is to sites and the sites of the | |
| IFL detections; 2) sless; 3) photos of the comments (such as statures. Attach addit is a been veritory Summary Taturitory Summary Taturitory All Date | interior of the patch, eart and end coordinate ional sheets if necessation of non-voluble. Provide the folloes UTM E | nowing site locaterior of the particular sof survey area by. calizing E wing information | ation, patch shap atch, and overall a if changed amo mPID duri on for each verif Pair Confirmed? | e, survey roul site. Describe ing surveys, s g First s ied territory a Nest Found? | Lyour site. Description of any unique habit Lyour site. Description o Territory a (e.g., vocalization | r detected WIFLs or their at features in Comments is to sites, unique habitates to sites, unique habitates from You Confirmed and Breeding Status on type, pair interactions | |
| IFL detections; 2) slists; 3) photos of the comments (such as statures. Attach additional observations) and observations Summary Tatritory Summary Tatritory All Date | interior of the patch, eart and end coordinate ional sheets if necessation of non-voluble. Provide the folloes UTM E | nowing site locaterior of the particular sof survey area by. calizing E wing information | ation, patch shap atch, and overall a if changed amo mPID duri on for each verif Pair Confirmed? | e, survey roul site. Describe ing surveys, s g First s ied territory a Nest Found? | Lyour site. Description of any unique habit Lyour site. Description o Territory a (e.g., vocalization | r detected WIFLs or their at features in Comments is to sites, unique habitates to sites, unique habitates from You Confirmed and Breeding Status on type, pair interactions | |
| IFL detections; 2) sists; 3) photos of the comments (such as statures. Attach addit is a been been been been been been been be | interior of the patch, eart and end coordinate ional sheets if necessation of non-voluble. Provide the folloes UTM E | nowing site locaterior of the particular sof survey area by. calizing E wing information | ation, patch shap atch, and overall a if changed amo mPID duri on for each verif Pair Confirmed? | e, survey roul site. Describe ing surveys, s g First s ied territory a Nest Found? | Lyour site. Description of any unique habit Lyour site. Description o Territory a (e.g., vocalization | r detected WIFLs or the at features in Comments to sites, unique habita to sites to sites, unique habita to sites to sites unique habita to sites to sites to sites to sites to sites to site sites to sites to sites to site sites to sit | |

Attach additional sheets if necessary

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Willow Flycatcher (WIFL) Survey and Detection Form (revised April 2010)

| Is copy | r, Wetland, of USGS m | ap marke | ed with s | urvey area | and WIFL s | ightings attached (as requ | ired)? | - 1 | les V | Vo |
|--|--|-----------------------------|-------------------------------------|---------------------------------------|--|---|---|--|--------------|-----------------------------|
| | rdinates: Sta Sta cy coordinate | p: E 3 | 21700 d betwee | n visits, er | N 397 N 397 hter coordinates in form | | Zone _ nents se | ction o | 7(See instru | |
| Survey # Observer(s) (Full Name) | Date (m/d/y) Survey time | Number of Adult WIFLs | Estimate d Number of Pairs | Estimated Number of Territories | Nest(s) Found? Y or N If Yes, number of nests | Comments (e.g., bird behavior, evidence of pairs or breeding; potential threats [livestock, cowbirds, Diorhabda spp.]) If Diorhabda found, contact USFWS and State WIFL coordinator | GPS Co (this is individual each su | GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found each survey). Include additional sheets if necessary. | | ocumenting birds found o |
| Survey # 1 Observer(s) R. Kellenmueller | Date 5 29 10 Start - 055 4 Stop 0637 Total hrs 0 4 5 | 0 | 0 | 0 | 7 | 2 BHCO detections. | # Birds | Sex | UTME | UTM N |
| Survey # 2 Observer(s) R - Kellermueller | Date 6/9/10 Start O625 Stop O713 Total hrs 074 | 0 | 0 | 0 | 2 | 3 BHCO detections. | # Birds | Sex | UTME | UIMN |
| Survey # 3 Observer(s) R. Kellermueller | Date 6/25/10 Start 06/15 Stop 06/50 Total hrs 0:35 | 0 | 0 | 0 | 2 | 1 BHCO detection. | # Birds | Sex | UTME | UTM N |
| Survey # 4 Observer(s) R. Kellermueller | Date 7/6/10 Start 0625 Stop 07/11 Total hrs0:44 | 0 | 0 | 0 | 2 | 4 BHCO detections. | # Birds | Sex | UTM E | UTM N |
| Survey # 5 Observer(s) R. Kellermueller | Date 7/12/10 Start 062.5 Stop 0712 Total hrs0:47 | 0 | 0 | 0 | 7 | 2 BHCO detections. | # Birds | Sex | UTM E | UTMN |
| Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and | | Total Adult Residents | Total Pairs | Total Territories | Total Nests | Were any Willow Flycatchers color-banded? YesNo | | | | |
| fledglings. Be careful not to do individuals. Total Survey Hrs 3 | | 0 | 0 | 0 | 0 | If yes, report color combination(s) in the comments section on back of form and report to USFWS. | | | | |

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| Reporting Individual Trevor Fetz | Phone # 505 - 828-9455 |
|--|---|
| Affiliation Howks Aloft, Inc. | E-mail +fetz@hawksaloft.org |
| Site Name (Allison Canyon | Date Report Completed 8 14 10 |
| Was this site surveyed in a previous year? Yes No Unknown | |
| Did you verify that this site name is consistent with that used in previous ye | ears? Yes No Not Applicable / |
| If site name is different, what name(s) was used in the past? | |
| If site was surveyed last year, did you survey the same general area this year | r? Yes No If no, summarize below. Yes No If no, summarize below. |
| Did you survey the same general area during each visit to this site this year? | Yes No If no, summarize below. |
| Did you survey like source general men enting and | |
| Management Authority for Survey Area: Federal V Municipal/Count Name of Management Entity or Owner (e.g., Tonto National Forest) Bur | ty State Tribal_ Private |
| Length of area surveyed: (km) | |
| Vegetation Characteristics: Check (only one) category that best describes th | ne predominant tree/shrub foliar layer at this site: |
| Native broadleaf plants (entirely or almost entirely, > 90% native) | |
| Mixed native and exotic plants (mostly native, 50 - 90% native) | |
| Mixed native and exotic plants (mostly exotic, 50 - 90% exotic) | |
| Exotic/introduced plants (entirely or almost entirely, > 90% exotic | |
| The state of the s | rejectifie comer |
| Identify the 2-3 predominant tree/shrub species in order of dominance. Use Salix exigua, Tamarix Chinensis | scientific names. |
| Average height of canopy (Do not include a range): | (meters) |
| Attach the following: 1) copy of USGS quad/topographical map (REQUIRE WIFL detections; 2) sketch or aerial photo showing site location, patch shapenests; 3) photos of the interior of the patch, exterior of the patch, and overall: Comments (such as start and end coordinates of survey area if changed amo features. Attach additional sheets if necessary. | e, survey route, location of any detected WIFLs or their site. Describe any unique habitat features in Comments. ong surveys, supplemental visits to sites, unique habitat |
| No real WIFL habitat present. Predomina | WE regetation is herbaceous. |
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| | |
| Territory Summary Table. Provide the following information for each verification of the second secon | ied territory at your site. |
| Territory All Dates UTM E UTM N Pair | Nest Description of How You Confirmed |
| Number Detected Confirmed? Y or N | Found? Territory and Breeding Status |
| | Y or N (e.g., vocalization type, pair interactions, nesting attempts, behavior) |
| | (a.G.) |
| | (a.G.) |
| | fa. B.i a contraction of basis international |
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| | (a.G.) |

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