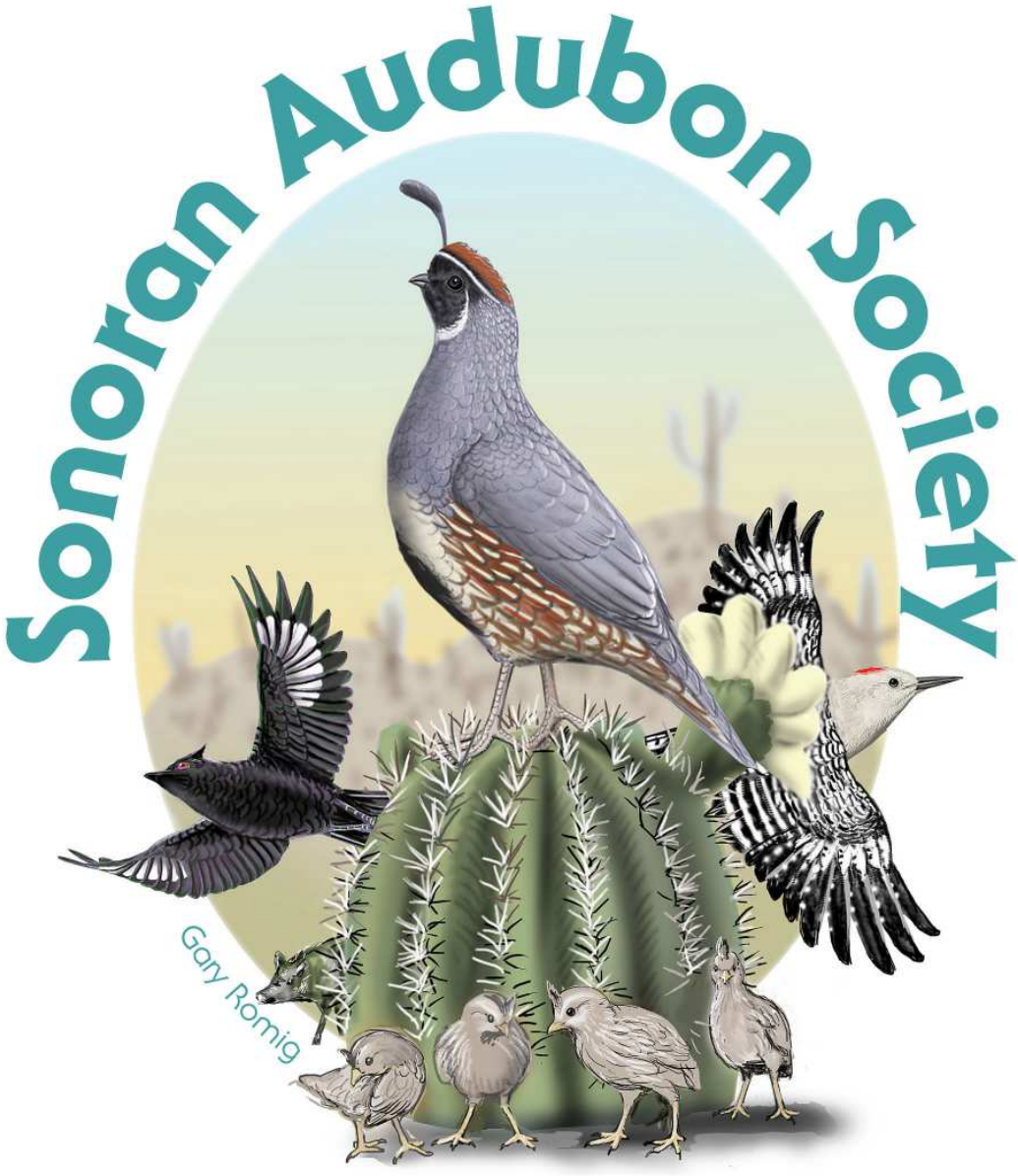
2007 IBA Report



Agua Fria National Monument
&
Salt & Gila River Systems

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Acknowledgments

This report has been compiled entirely from data supplied by citizen scientist volunteers who have spent hundreds of hours in the field recording bird sightings and their behavior.

None of this would have been possible without the dedication of area leaders who organized their teams, scheduled surveys, and compiled pages of paperwork. The following tables recognize those leaders and their teams for their efforts for 2007.

Agua Fria National Monument

Sycamore Creek East	Sycamore Creek West	Horseshoe Ford	Perry Mesa Grasslands
Sam Stearman Bob McCormick	Andre Tarby Tice Supplee	Bob McCormick Ruth Vivas Tim Flood Richard Kaiser Anne Durning	Charles Richards Loretta Richards George Wall Eleanor Campbell Rich Schooler Tice Supplee Jay Vacca

Salt - Gila

B&M	Robbins Butte	Arlington	Jackie Meck	Tres Rios
Bob McCormick Dick Fogle Rich Schooler Carol Schooler	Andree Tarby Tice Supplee Frank Insana Rachel Smith Carl Vasil	Frank Insana Tice Supplee	Bob McCormick	Daniella Yellan Andre Tarby Frank Insana

Additional credit goes to Scott Wilbur and Tice Supplee who provided guidance on field training and data entry and to Dr. Larry Pierce who created the Microsoft Access Queries that organized the data.

Thanks also go to the various ranchers of the Agua Fria NM that allowed us access to, or across their property

Photos for this report have been supplied by the team members unless otherwise noted. Josh Burns produced the DeLorme survey maps. The Agua Fria National Monument map comes from the Bureau of Land Management. The National Geographic maps were produced by myself for areas not covered by a DeLorme map.

Grant money from Arizona Game and Fish's Arizona Bird Conservation Initiative provided equipment and transportation re-imbursement. This proposal was produced by Karen LaFrance, Josh Burns and Dwayne Fink.

Bob McCormick
President
Sonoran Audubon Society

Survey Timing/Effort: AFNM & Salt Gila IBAs

Number of Surveys Requested for each Survey Type:

Line Transect Surveys:

- Complete one survey per season. Use Arizona seasons if in desert zone. 'Arizona seasons" includes the addition of an early spring nesting survey, and a late summer survey following the initiation of monsoon rains. The numbers of surveys recommended are: 5 (minimum) good, 7 very good, 9 (includes 2 nocturnal) excellent.

1-January
1-Late March/Early April (desert spring nesting)
1 to 2-Late April thru May 21 (migration)
1-Mid July (after monsoon rains)
1 to 2-Early September (migration) or for two surveys: Late August and mid-September.

Basic Point Count Surveys:

- Complete two surveys during breeding period.

1-Late April to early May
1-Mid to late July

For low desert nesting species:

1-Late March to mid April
1-Mid to late July

Census Surveys (Wetlands):

- Complete one survey per season. Use Arizona seasons if in desert zone. The numbers of surveys recommended are: 8 (minimum) good, 11 excellent.

1-Winter (Jan 9)
1 to 2-early Spring-early nesting (March 13, March 27)
2 to 3-Migration & Nesting (April 17, May 15, May 29)
1-Summer-July for late nesters & passage shorebirds (July 10)
2 to 3-late Summer-August for more migration (Aug. 14, Aug. 28, Sept. 11)
1-Fall migration (October 3).

(Optional) Census Surveys (Raptor nesting studies):

- Complete 4 surveys.

*(Optional) Late January/early February (find old nests before leaf-out)
1-Late March/Early April (Number of territories occupied)
1-Mid to late April (Number of pairs incubating)
1-Early June (Number of pairs hatching young)
1-Mid to late July (Number of pairs fledging young, i.e., for small raptors $\geq$ 75% of fledge age or fully fledged, for large raptors > 80% of fledge age or fully fledged)

(Optional) Nocturnal Surveys:

- Complete an early evening to night survey for owls, poorwills, nighthawks, and nightjars, twice (or 3 times) a season (1st: March 15, 2nd: early to mid May).

Survey Timing/Effort:

Number of Surveys Requested for each Survey Type:

Line Transect Surveys:

- Complete one survey per season. Use Arizona seasons if in desert zone. 'Arizona seasons" includes the addition of an early spring nesting survey, and a late summer survey following the initiation of monsoon rains. The numbers of surveys recommended are: 5 (minimum) good, 7 very good, 9 (includes 2 nocturnal) excellent.

1-January

1-Late March/Early April (desert spring nesting)
1 to 2-Late April thru May 21 (migration)
1-Mid July (after monsoon rains)
1 to 2-Early September (migration) or for two surveys: Late August and mid-September.

- Possibly two surveys during migration.

Basic Point Count Surveys:

- Complete two surveys during breeding period.

1-Late April to early May
1-Mid to late July

For low desert nesting species:

1-Late March to mid April
1-Mid to late July

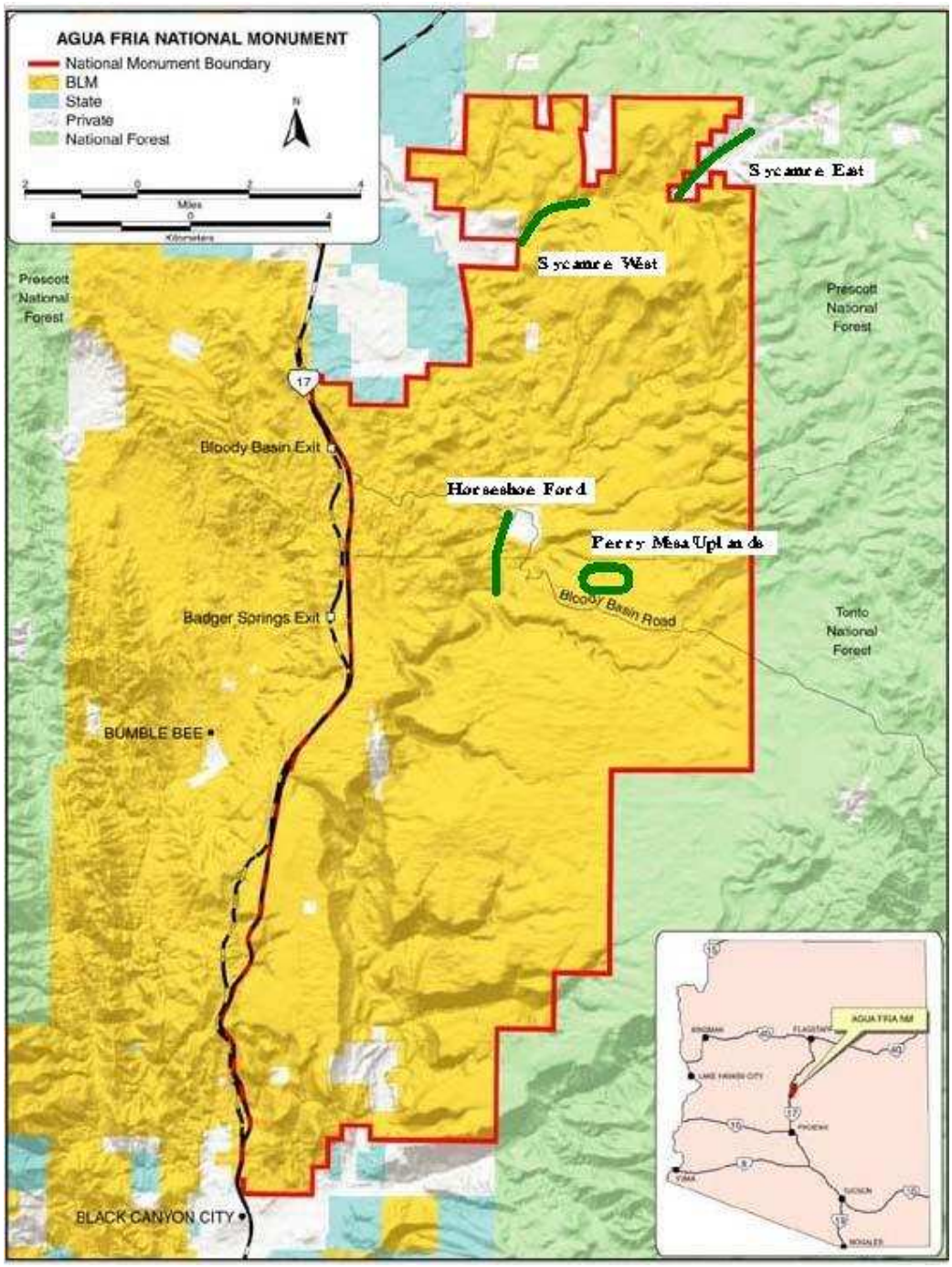
Census Surveys (Wetlands):

- Complete one survey per season. Use Arizona seasons if in desert zone. The numbers of surveys recommended are: 8 (minimum) good, 11 excellent.

1-Winter (Jan 9)
1 to 2-early Spring-early nesting (March 13, March 27)
2 to 3-Migration & Nesting (April 17, May 15, May 29)
1-Summer-July for late nesters & passage shorebirds (July 10)
2 to 3-late Summer-August for more migration (Aug. 14, Aug. 28, Sept. 11)
1-Fall migration (October 3).

Agua Fria National Monument

Three transects have been set up in the Agua Fria National Monument. These are the Sycamore East, Sycamore West, and Horseshoe Ford South Transects. In addition, Area Searches and Point Counts have been set up for the grasslands on Perry Mesa.



Bureau of Land Management Map

Agua Fria National Monument
Sonoran Audubon Society IBA Bird Count Hours and miles

Transect: Sycamore Creek East

	Date	Counter	Agency	Hours on Project	Miles
	4/14/2007	Sam Stearman	SAS	6.75	140
		Bob McCormick	SAS	7.75	140
	5/15/2007	Sam Stearman	SAS	5.5	140
	5/17/2007	Sam Stearman	SAS	5.5	140
	8/18/2007	Sam Stearman	SAS	6	140
		Bob McCormick	SAS	7	140
	9/15/2007	Sam Stearman	SAS	6	140
			Total	44.5	980

Transect: Sycamore Creek West

	Date	Counter	Agency	Hours on Project	Miles
	2/9/2007	Andre Tarby	SAS	9.5	-
		Tice Supplee	AAZ	9.5	-
	5/11/2007	Andre Tarby	SAS	9.5	-
		Tice Supplee	AAZ	9.5	-
			Total	19	0

Transect: Horseshoe Ford South

	Date	Counter	Agency	Hours on Project	Miles
	1/27/2007	Bob McCormick	SAS	6	142
	4/1/2007	Bob McCormick	SAS	9	200
		Ruth Vivas	-	8	154
		Tim Flood	FAFNM	7.25	114
	4/29/2007	Bob McCormick	SAS	8	-
		Ruth Vivas	-	8	-
		Tim Flood	FAFNM	8	-
		Anne Durning	SAS	8	-
		Richard Kaiser	SAS	8	-
	7/26/2007	Tice	AAZ	- -	- -
	8/12/2007	Bob McCormick	SAS	7	-
		Richard Kaiser	SAS	7	-
	9/9/2007	Bob McCormick	SAS	8	134
		Ruth Vivas	-	8	134
		Tim Flood	FAFNM	8	122
			Total	108.25	1000

Area Search: Perry Mesa

	Date	Counter	Agency	Hours on Project	Miles
AS	4/17/2007	Charles Richards	SAS	6.75	118
		George Wall	SAS	6.75	118
		Eleanor Campbell	SAS	6.75	118
		Rich Schooler	SAS	6.75	118
AS	5/2/2007	Charles Richards	SAS	6.75	118
		George Wall	SAS	6.75	118
		Loretta Richards	SAS	6.75	118
		Rich Schooler	SAS	6.75	118
PC	5/15/2007	Tice Supplee	AAZ	5.5	-
		Jay Vacca	BLM	5.5	-
AS	8/10/2007	Charles Richards	SAS	6.5	119
		Eleanor Campbell	SAS	6.5	119
		Loretta Richards	SAS	6.5	119
			Total	84.5	119
		Grand Total for the 4 count areas		**256.25**	**2099**

Notes: 12 different counters made 33 visits Not all miles were listed on the forms
SAS - Sonoran Audubon, FAFNM - Friends of Agua Fria NM, AAZ - Audubon Arizona, - None

Summary 2007 – Agua Fria National Monument – 112 species

Code	Common Name	Horseshoe	Sycam W	Sycam E	Perry AS1	Perry AS2	Perry AS3	Perry PC	Totals
MALL	Mallard	13	2	3	-	-	-	-	18
CITE	Cinimon Teal	1	-	-	-	-	-	-	1
NOSH	Northern Shoveler	-	-	-	-	-	1	-	1
GAQU	Gambel's Quail	17	10	54	9	-	9	10	109
GBHE	Great Blue Heron	1	1	-	-	-	-	-	2
GRHE	Green Heron	1	-	-	-	-	-	-	1
TUVU	Turkey Vulture	5	1	10	-	-	3	-	19
SSHA	Sharp-shinned Hawk	-	-	-	-	-	1	-	1
COHA	Cooper's Hawk	3	-	-	-	-	-	-	3
CBHA	Common Black-Hawk	1	1	1	-	-	-	-	3
ZTHA	Zone-tailed Hawk	-	2	2	-	-	2	-	6
RTHA	Red-tailed Hawk	6	1	1	1	-	-	3	12
GOEA	Golden Eagle	1	-	2	-	-	-	-	3
AMKE	American Kestrel	4	-	3	-	-	1	1	9
PRFA	Prarie Falcon	1	-	-	-	-	-	1	2
KILL	Killdeer	3	-	1	-	-	-	-	4
WISN	Wilson's Snipe	2	-	-	-	-	-	-	2
WWDO	White-winged Dove	1	5	6	8	1	3	-	24
MODO	Mourning Dove	66	14	55	15	41	18	18	227
YBCU	Yellow-billed Cuckoo	2	-	-	-	-	-	-	2
GRRO	Greater Roadrunner	-	-	-	-	-	1	-	1
BLSW	Black Swift	-	-	-	-	-	-	1	1
BCHU	Black-chinned Hummingbird	1	1	-	-	-	-	-	2
ANHU	Anna's Hummingbird	4	3	2	-	-	-	-	9
?HUM	Unidentified Hummingbird	5	-	1	1	-	-	-	7
BEKI	Belted Kingfisher	2	1	1	-	-	-	-	4
GIWO	Gila Woodpecker	13	6	20	-	-	-	-	39
WISA	Williamson's Sapsucker	1	-	-	-	-	-	-	1
LBWO	Ladder-backed Woodpecker	13	4	7	1	-	-	-	25
HAWO	Hairy Woodpecker	1	-	-	-	-	-	-	1
NOFL	Northern Flicker	6	-	5	-	-	-	-	11
WEWP	Western Wood-Pewee	2	-	1	-	-	-	-	3
WIFL	Willow Flycatcher	-	-	1	-	-	-	-	1
HAFL	Hammond's Flycatcher	-	-	1	-	-	-	-	1
GRFL	Gray Flycatcher	-	-	-	-	-	3	-	3
DUFL	Dusky Flycatcher	-	1	-	-	-	-	-	1
BLPH	Black Phoebe	18	2	5	-	-	-	-	25
SAPH	Say's Phoebe	2	-	1	-	-	-	-	3
VEFL	Vermilion Flycatcher	1	-	1	-	-	-	-	2
ATFL	Ash-throated Flycatcher	2	4	14	1	-	1	1	23
CAKI	Cassin's Kingbird	-	1	-	-	-	-	-	1
WEKI	Western Kingbird	4	7	9	14	3	-	3	40
LOSR	Loggerhead Shrike	-	-	-	4	1	3	-	8
BEVI	Bell's Vireo	52	9	13	-	-	-	1	75
PLVI	Plumbeous Vireo	2	1	-	-	-	-	-	3
PCBV	Unidentified "Solitary" Vireo (PLVI,CAVI,BHVI)	3	-	-	-	-	-	-	3
WAVI	Warbling Vireo	11	-	3	-	-	-	-	14
STJA	Steller's Jay	-	-	-	-	-	-	-	0
WESJ	Western Scrub-Jay	1	-	2	-	-	1	-	4
CORA	Common Raven	11	-	4	1	-	4	5	25
HOLA	Horned Lark	-	-	-	-	-	-	5	5
VGSW	Vilot-green Swallow	-	7	20	6	6	-	-	39
NRWS	Northern Rough-winged Swallow	2	2	-	-	-	-	-	4
CLSW	Cliff Swallow	-	-	6	-	-	-	-	6
?SWA	Unidentified Swallow	-	-	8	-	-	-	-	8
BRTI	Bridled Titmouse	1	-	9	-	-	-	-	10
JUTI	Juniper Titmouse	-	3	1	-	-	-	-	4
VERD	Verdin	26	4	4	-	-	2	-	36
BUSH	Bushtit	5	-	1	-	-	8	-	14
WBNU	White-breasted Nuthatch	3	-	-	-	-	-	-	3
CACW	Cactus Wren	5	5	4	-	-	-	3	17
ROWR	Rock Wren	6	-	5	-	-	-	-	11

CANW	Canyon Wren	5	3	-	-	-	-	-	8
BEWR	Bewick's Wren	5	4	2	-	-	4	-	15
HOWR	House Wren	10	-	-	-	-	1	-	11
RCKI	Ruby-crowned Kinglet	48	2	7	-	-	-	-	57
BGGN	Blue-gray Gnatcatcher	-	-	-	-	-	1	-	1
BTGN	Black-tailed Gnatcatcher	3	-	-	-	-	-	-	3
WEBL	Western Bluebird	4	11	-	-	-	-	-	15
TOSO	Townsend's Solitaire	4	5	2	-	-	-	-	11
HETH	Hermit Thrush	2	2	-	-	-	-	-	4
AMRO	American Robin	1	23	-	-	-	-	-	24
NOMO	Northern Mockingbird	-	2	3	3	2	5	17	32
CBTH	Curve-billed Thrasher	1	-	-	1	-	-	1	3
EUST	European Starling	-	-	8	-	-	-	-	8
AMPI	American Pipit	1	-	-	-	-	-	-	1
PHAI	Phainopepla	18	15	10	-	-	1	3	47
OCWA	Orange-crowned Warbler	5	1	1	-	-	-	1	8
LUWA	Lucy's Warbler	1	3	8	-	-	-	-	12
YWAR	Yellow Warbler	77	8	15	-	-	-	-	100
YRWA	Yellow-rumped Warbler	47	-	9	-	-	-	-	56
BTYW	Black-throated Gray Warbler	5	-	-	-	-	-	-	5
MGWA	MacGillivray's Warbler	2	-	-	-	-	-	-	2
WIWA	Wilson's Warbler	13	-	3	-	-	-	1	17
YBCH	Yellow-breasted Chat	1	-	-	-	-	-	-	1
SUTA	Summer Tanager	51	6	15	-	-	1	-	73
WETA	Western Tanager	3	-	3	2	-	-	-	8
GTTO	Green-tailed Towhee	3	1	1	3	-	7	-	15
SPTO	Spotted Towhee	5	1	-	-	-	-	-	6
CANT	Canyon Towhee	1	-	1	1	2	3	-	8
ABTO	Abert's Towhee	32	1	-	4	-	1	-	38
RCSP	Rufous-crowned Sparrow	-	-	1	-	-	-	-	1
CHSP	Chipping Sparrow	5	12	23	16	2	1	-	59
BRSP	Brewer's Sparrow	7	-	-	318	342	51	10	728
VESP	Vesper Sparrow	1	-	-	-	-	-	-	1
[illegible]	/wEWkwYC5NLF2\/	3	-	2	32	12	-	1	50
[illegible]	[illegible]d Sparrow	20	-	12	30	22	12	47	143
LABU	Lark Bunting	-	-	-	1	-	-	-	1
SOSP	Song Sparrow	3	-	-	-	-	-	-	3
LISP	Lincoln's Sparrow	4	3	7	5	-	-	-	19
WCSP	White-crowned Sparrow	34	9	4	105	165	107	-	424
DEJU	Dark-eyed Junco	18	15	-	-	-	-	-	33
NOCA	Northern Cardinal	19	8	17	-	-	2	-	46
BHGR	Black-headed Grosbeak	1	-	9	-	-	-	-	10
BLGR	Blue Grosbeak	41	1	4	-	-	-	-	46
LAZB	Lazuli Bunting	6	2	-	-	-	-	-	8
WEME	Western Meadowlark	41	-	-	11	6	3	-	61
?MEA	Unidentified Meadow Lark	-	-	-	-	-	-	3	3
BROC	Bronzed Cowbird	-	-	2	-	-	-	-	2
BHCO	Brown-headed Cowbird	10	2	1	-	-	2	-	15
OROR	Orchard Oriole	2	-	-	-	-	-	-	2
HOOR	Hooded Oriole	2	2	-	-	-	-	-	4
BUOR	Bullock's Oriole	1	4	1	-	-	-	-	6
SCOR	Scott's Oriole	-	-	-	-	-	-	-	0
?ORI	Unidentified Oriole	-	-	2	-	-	-	1	3
HOFI	House Finch	26	2	29	-	-	-	-	57
LEGO	Lesser Goldfinch	154	11	42	-	-	-	-	207
MUDE	Mule Deer	-	-	1	-	-	-	-	1

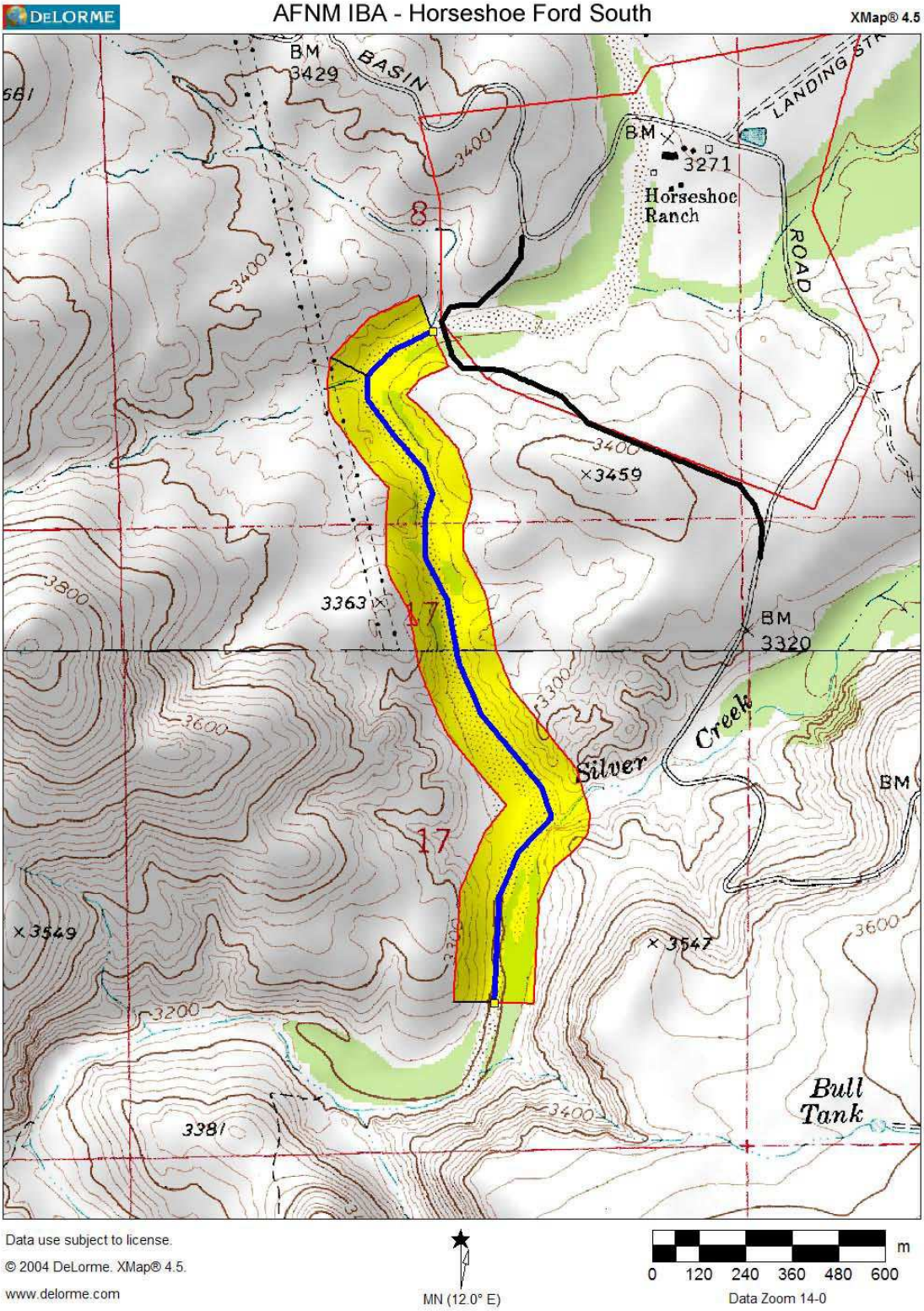
Agua Fria National Monument - Horseshoe Ford South
by Bob McCormick

This TRANSECT Survey is located along the Agua Fria River South of where Bloody Basin Road crosses the river. It is located approximately five miles East of I-17 down a very good dirt road and about 50 miles North of Phoenix. The transect runs south along the river 2 Kilometers to a point a few hundred yards past where Silver Creek enters the Agua Fria River. The river has about the same amount of water in it all year except for very dry periods where only a few stretches still run. The average flow appears to be around 5 cfs but can be inaccessible after heavy rains. The river contains an amazing variety of trees. Huge Hackberry, Willow, Cottonwood, Ash, Walnut, Juniper, Sycamore, Mesquite, and others are all in close proximity.

Horseshoe Ranch has removed the cattle from the river and the results are amazing. In the last two years the trees are really starting to get big, especially south of where Silver Creek dumps in. The biggest threat now is ATC use in the river bottom. Every visit has fresh tracks.

This transect is one of the best places to bird watch close to phoenix. It has easy access and an incredible variety of birds. The most amazing thing about this area is the difference in birds species from Season to season. Golden Eagle, Common Black Hawk, Falcons, Bluebirds, Various Sparrows, Titmice, and unusual Woodpeckers are seen in the winter. Tanagers, Cuckoos, Buntings, Grosbeaks, and Orioles all nest here in the summer. Spring migration can be spectacular.

Start point looking North – Cattle have been recently been removed from the area – note lack of vegetation in the river channel – Photo taken in 2006



Points are yellow boxes on map

North (at Horseshoe Ford) End
UTM: 12S 0402061E 3791009N LatLon: N34.25739° W112.06443°

South (near Baby Canyon) End

UTM: 12S 0402202E 3789287N LatLon: N34.24187° W112.06270°

Horseshoe Ford South Transect 2007 - 90 species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
MALL	Mallard	8		2	3									13
CITE	Cinimon Teal			1										1
GAQU	Gambel's Quail			4	13									17
GBHE	Great Blue Heron				1									1
GRHE	Green Heron									1				1
TUVU	Turkey Vulture			2	1			1		1				5
COHA	Cooper's Hawk				1				2					3
CBHA	Common Black-Hawk								1					1
RTHA	Red-tailed Hawk	1			5					1				6
GOEA	Golden Eagle				1									1
AMKE	American Kestrel			2	1					1				4
PRFA	Prarie Falcon	1												1
KILL	Killdeer	1			2									3
WISN	Wilson's Snipe	1			1									2
WWDO	White-winged Dove				1									1
MODO	Mourning Dove			4	17			5	19	21				66
YBCU	Yellow-billed Cuckoo								1	1				2
BCHU	Black-chinned Hummingbird				1									1
ANHU	Anna's Hummingbird			3					1					4
?HUM	Unidentified Hummingbird			1	3				1					5
BEKI	Belted Kingfisher	1			1									2
GIWO	Gila Woodpecker	1		1	2			1	5	3				13
WISA	Williamson's Sapsucker									1				1
LBWO	Ladder-backed Woodpecker	1		4	1			3	2	2				13
HAWO	Hairy Woodpecker	1												1
NOFL	Northern Flicker	1		4					1					6
WEWP	Western Wood-Pewee				1					1				2
BLPH	Black Phoebe	1		4				7	2	4				18
SAPH	Say's Phoebe	1								1				2
VEFL	Vermilion Flycatcher									1				1
ATFL	Ash-throated Flycatcher				1			1						2
WEKI	Western Kingbird				1			3						4
BEVI	Bell's Vireo				8			17	15	12				52
PLVI	Plumbeous Vireo									2				2
PCBV	Unidentified "Solitary" Vireo (PLVI,CAVI,BHVI)			1	2									3
WAVI	Warbling Vireo									11				11
WESJ	Western Scrub-Jay									1				1
CORA	Common Raven	2		3	4				1	1				11
NRWS	Northern Rough-winged Swallow				2									2
BRTI	Bridled Titmouse								1					1
VERD	Verdin	1		4	5			10	5	1				26
BUSH	Bushtit								5					5
WBNU	White-breasted Nuthatch													3
CACW	Cactus Wren				2			1	1	2				5
ROWR	Rock Wren	1		1	2				1	1				6
CANW	Canyon Wren			2				2	1					5
BEWR	Bewick's Wren	1			1			3						5
HOWR	House Wren	3								7				10
RCKI	Ruby-crowned Kinglet	3		37	1					5				48
BTGN	Black-tailed Gnatcatcher	1		1					1					3
WEBL	Western Bluebird	4												4
TOSO	Townsend's Solitaire	1			3									4
HETH	Hermit Thrush			2										2
AMRO	American Robin			1										1
CBTH	Curve-billed Thrasher								1					1
AMPI	American Pipit	1												1
PHAI	Phainopepla			1	16			1						18
OCWA	Orange-crowned Warbler			1	3				1					5
LUWA	Lucy's Warbler				1									1
YWAR	Yellow Warbler			12	26			23	13	3				77
YRWA	Yellow-rumped Warbler			44	3									47

BTYW	Black-throated Gray Warbler			5							5
MGWA	MacGillivray's Warbler			2							2
WIWA	Wilson's Warbler			13							13
YBCH	Yellow-breasted Chat					1					1
SUTA	Summer Tanager			18		19	4	10			51
WETA	Western Tanager					2	1				3
GTTO	Green-tailed Towhee		2	1							3
SPTO	Spotted Towhee	3	2								5
CANT	Canyon Towhee					1					1
ABTO	Abert's Towhee	2	4	2		12	10	2			32
CHSP	Chipping Sparrow		4	1							5
BRSP	Brewer's Sparrow		2	1				4			7
VESP	Vesper Sparrow						1				1
	/wEWkwYC5NLF2 w							3			3
	ed Sparrow			15		2	3				20
SOSP	Song Sparrow		3								3
LISP	Lincoln's Sparrow	1	1	2							4
WCSP	White-crowned Sparrow	4	24	6							34
DEJU	Dark-eyed Junco	10	8								18
NOCA	Northern Cardinal			13		4	2				19
BHGR	Black-headed Grosbeak						1				1
BLGR	Blue Grosbeak					6	13	22			41
LAZB	Lazuli Bunting						6				6
WEME	Western Meadowlark	41									41
BHCO	Brown-headed Cowbird			5		5					10
OROR	Orchard Oriole			2							2
HOOR	Hooded Oriole			1		1					2
BUOR	Bullock's Oriole					1					1
HOFI	House Finch	2	15			1	6	2			26
LEGO	Lesser Goldfinch	3	25	12		51	42	21			154

Data sets

3588	1/27/2007	AGF_HFT
3590	4/1/2007	AGF_HFT
3592	4/29/2007	AGF_HFT
2806	7/26/2007	AGF_HFT
3596	8/12/2007	AGF_HFT
3638	9/9/2007	AGF_HFT
3589	1/27/2007	AGF_SUP
3591	4/1/2007	AGF_SUP
3636	4/29/2007	AGF_SUP
3637	8/12/2007	AGF_SUP
3639	9/9/2007	AGF_SUP

Agua Fria National Monument - Sycamore Canyon West
by Chuck and Loretta Richards

This transect is located on Sycamore Creek at the point where EZ Ranch property ends and AFNM property begins. The transect is 100 meters wide and runs North East for 2 kilometers of the AFNM. Transect access is through the EZ Ranch with prior approval of the property owner Mr. Lester Smith. The number to call for approval is 928-632-7106.

From Cordes Junction, drive east on Stage Coach Trail, then south on Red Rock Lane and east on Quail Run Dr and then follow the signs to EZ Ranch. At the ranch, pass by the ranch house and through the gate at the right rear of the house. Close all gates behind you. Proceed on the ranch road to the gate on the AFNM line. Park to the left and proceed on foot through a fence access just to the right of the gate. Go down hill to Sycamore creek which is the beginning of the transect. Proceed up stream.

Sycamore Canyon is mainly riparian. Initially along the right as you move upstream there are cliffs. To the left, there is floodplain with Pine/Juniper further left and then cliffs. This terrain shifts back and forth as you move up along the stream. Above the creek beds on top of the banks are cattle paths. This area is leased for grazing to EZ Ranch. Young willow saplings are noticeably absent in this area because of the cattle grazing.

Because of the direction of travel (Northeast) the sun rise to the right somewhat impairs vision. This occurs more as the morning progresses. Rain can flood the creek bed forcing the walking to the cattle trails or bushwhacking. This limits visibility.

The latest survey was done on 2/9/07. No cattle or horses were observed. No degradation of habitat, since our last survey, was observed. On previous surveys we observed a Zone-tailed Hawk's nest as well as a nestling. On the 2/9/07 survey, there was no sign of the Zone-tailed Hawk's nest. There were only 21 species of birds sighted or heard on this survey. The water level of the creek was high enough to deter us from crossing to the east side.

Midpoint looking downstream – photo taken in 2006

AFNM IBA - Sycamore Creek

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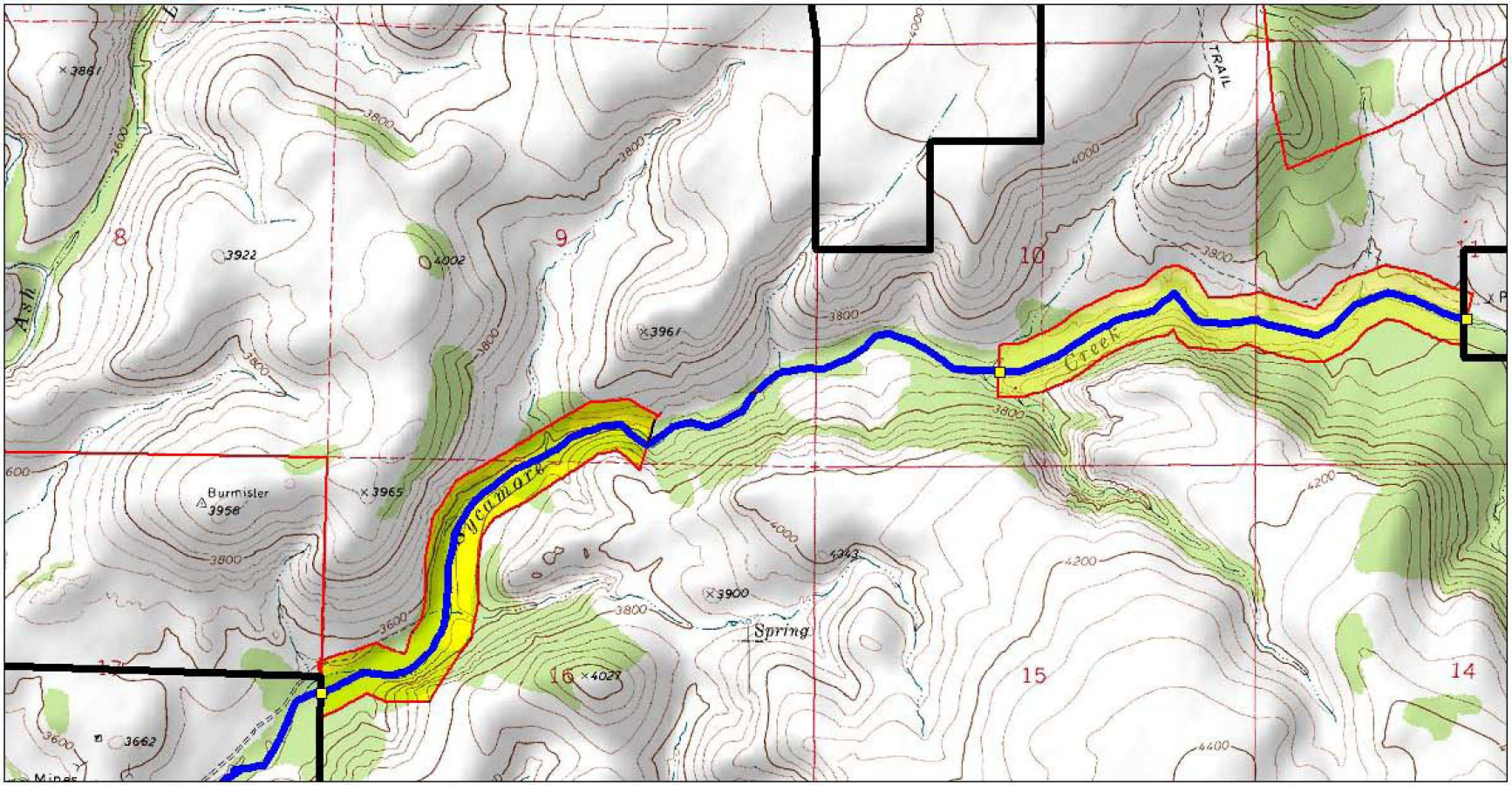

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MN (12.0° E)

0 200 400 600 800 1000 1200 1400 m

Data Zoom 13-0

Sycamore Creek West Transect 2007 - 53 species

Code	Common Name	Jan	Feb 9	Mar	Apr	May 11	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
MALL	Mallard					2								2
GAQU	Gambel's Quail					10(7)								10
GBHE	Great Blue Heron					1								1
TUVU	Turkey Vulture					1								1
CBHA	Common Black-Hawk					1								1
ZTHA	Zone-tailed Hawk					2								2
RTHA	Red-tailed Hawk		1			1								2
WWDO	White-winged Dove					5(4)								5
MODO	Mourning Dove		2			12(8)								14
BCHU	Black-chinned Hummingbird					1								1
ANHU	Anna's Hummingbird					3(2)								3
BEKI	Belted Kingfisher		1											1
GIWO	Gila Woodpecker		3(3)			3(3)								6
LBWO	Ladder-backed Woodpecker					2(2)								4
DUFL	Dusky Flycatcher					1								1
BLPH	Black Phoebe		1			1								2
ATFL	Ash-throated Flycatcher					4(4)								4
CAKI	Cassin's Kingbird					1								1
WEKI	Western Kingbird					7(3)								7
BEVI	Bell's Vireo					9(7)								9
PLVI	Plumbeous Vireo					1								1
VGSW	Violet-green Swallow					7(3)								7
NRWS	Northern Rough-winged Swallow					2(2)								2
JUTI	Juniper Titmouse		3(3)											3
VERD	Verdin					4(3)								4
CACW	Cactus Wren		1			4(4)								5
CANW	Canyon Wren					3(3)								3
BEWR	Bewick's Wren					4(3)								4
RCKI	Ruby-crowned Kinglet		2(2)											2
WEBL	Western Bluebird		11											11
TOSO	Townsend's Solitaire		5(5)											5
HETH	Hermit Thrush		2(2)											2
AMRO	American Robin		23(8)											23
NOMO	Northern Mockingbird					2(2)								2
PHAI	Phainopepla					15(7)								15
OCWA	Orange-crowned Warbler					1								1
LUWA	Lucy's Warbler					3(2)								3
YWAR	Yellow Warbler					8(6)								8
SUTA	Summer Tanager					6(5)								6
GTTO	Green-tailed Towhee					1								1
SPTO	Spotted Towhee		1											1
ABTO	Abert's Towhee		1											1
CHSP	Chipping Sparrow		11(4)			1								12
LISP	Lincoln's Sparrow		2			1								3
WCSP	White-crowned Sparrow		7(2)			2								9
DEJU	Dark-eyed Junco		15(4)											15
NOCA	Northern Cardinal		5(2)			3(3)								8
BLGR	Blue Grosbeak					1								1
LAZB	Lazuli Bunting					2								2
BHCO	Brown-headed Cowbird					2(2)								2
HOOR	Hooded Oriole					2								2
BUOR	Bullock's Oriole					4(3)								4
HOFI	House Finch					2								2
LEGO	Lesser Goldfinch		4(2)			7(4)								11

Notes: First number is total # of birds seen, number in ( ) how many times species was observed. ex 3(3) = 3 singles , 8(1) = flock of 8

Data sets

3726	2/9/2007	AGF_SWT
3587	5/11/2007	AGF_SWT

Agua Fria National Monument - Sycamore Canyon East
by Bob McCormick

This TRANSECT is located on private property on Sycamore Creek south of the small community of Dugas. It is located approximately 7 miles down Dugas Road which is located about 60 miles North of Phoenix or about 8 miles North of Cortes Lakes. The transect runs from Burt Tesky's property south along the creek 2 Kilometers to a point a few hundred yards past the summer home of Bill Willey. This transect can be done along the access road with short excursions off to the better habitats. The river has about the same amount of water in it all year. The average flow appears to be less than 5 cfs but can be much higher after heavy rains. This portion of Sycamore Creek is different from the rest of the Agua Fria National Monument as it contains a large variety of riparian trees surrounded by Juniper forest as opposed to Desert Scrub bordering the riparian areas over most of the rest of the Monument.

Cattle are run in small numbers along with the occasional friendly horse. A few small pastures are present between the sloping hillsides and the rocky creek bottom. The riparian area's trees sometimes fill the valley completely but usually only border the creek.

Large numbers of Dark-eyed Juncos and Robins are seen here in the winter along with many species of Wrens. This area is also known for the abundance of Zone-tailed Hawk nests. These birds are always seen here from Spring to Fall. Sparrows are seen in large numbers of individuals as well as species. Golden Eagles are also common at this site. Sonoran Mud Turtles have also been seen at this site.

Attempts at subdividing the Willey property as of this time have come to naught.

Mid-point looking North – photo taken in 2006

AFNM IBA - Sycamore Creek

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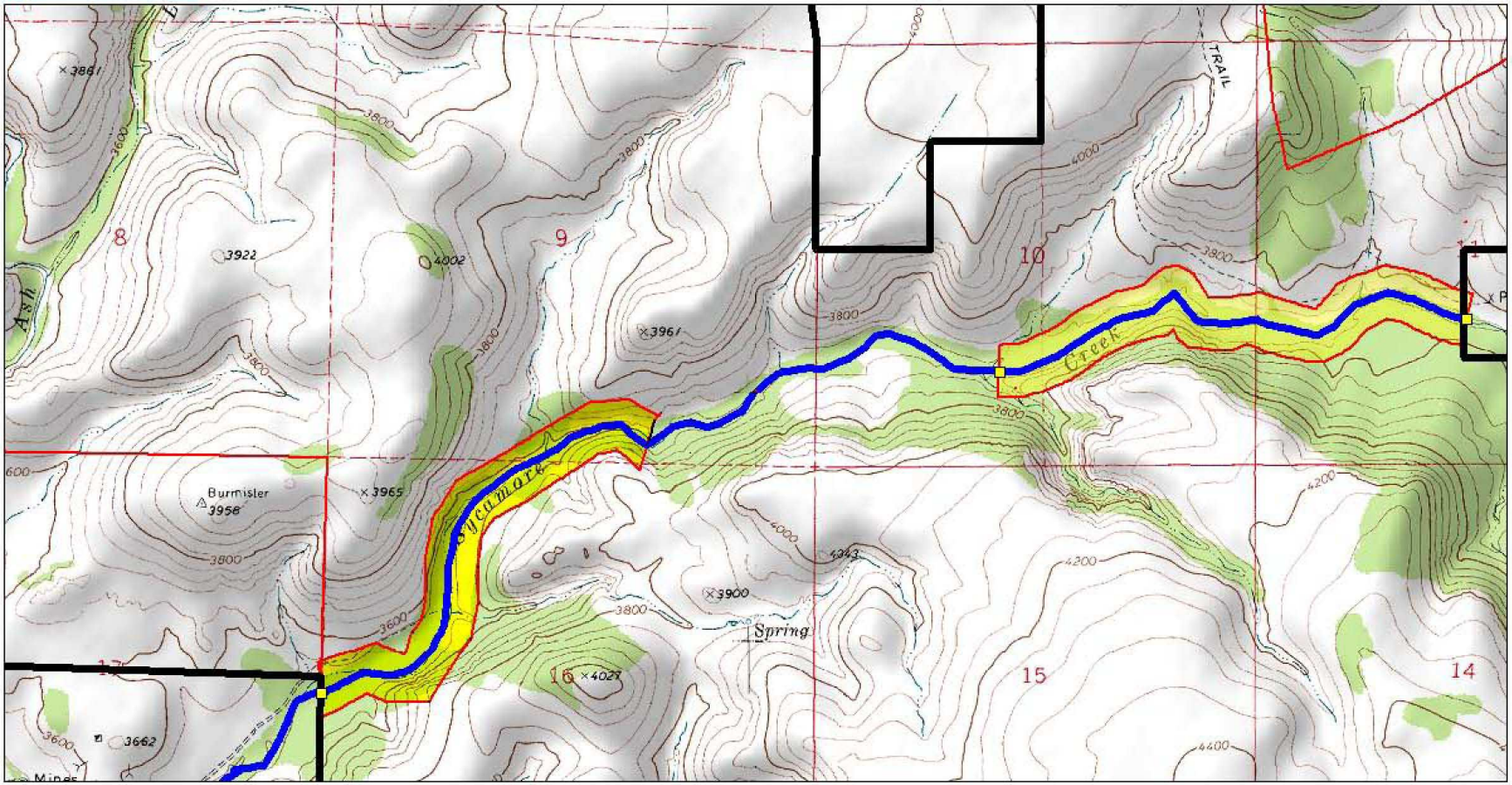

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MN (12.0° E)

0 200 400 600 800 1000 1200 1400 m

Data Zoom 13-0

Sycamore Creek East Transect 2007 – 65 species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
MALL	Mallard				2	1								3
GAQU	Gambel's Quail				11(4)	15(3)			22(2)	7				54
TUVU	Turkey Vulture				1	1			8					10
CBHA	Common Black-Hawk								1					1
ZTHA	Zone-tailed Hawk				1	1								2
RTHA	Red-tailed Hawk				1					1				2
GOEA	Golden Eagle				2									2
AMKE	American Kestrel				2(2)				1					3
KILL	Killdeer					1								1
WWDO	White-winged Dove				1	5(4)								6
MODO	Mourning Dove				20(8)	6(5)			29(7)					55
ANHU	Anna's Hummingbird				2(2)									2
?HUM	Unidentified Hummingbird								1					1
BEKI	Belted Kingfisher									1				1
GIWO	Gila Woodpecker				6(4)	3(3)			8(6)	3(3)				20
LBWO	Ladder-backed Woodpecker				3(2)	1			3(3)					7
NOFL	Northern Flicker								3(2)	2(2)				5
WEWP	Western Wood-Pewee								1					1
WIFL	Willow Flycatcher								1					1
HAFL	Hammond's Flycatcher				1									1
BLPH	Black Phoebe				2(2)	2			1					5
SAPH	Say's Phoebe					1								1
VEFL	Vermilion Flycatcher				1									1
ATFL	Ash-throated Flycatcher				11(6)	3(3)								14
WEKI	Western Kingbird				1	7(5)			1					9
BEVI	Bell's Vireo				7(5)	1			3(2)	2				13
WAVI	Warbling Vireo					1				2				3
WESJ	Western Scrub-Jay								1	1				2
CORA	Common Raven				2(2)					2				4
VGSW	Violet-green Swallow				16(3)	4(2)								20
CLSW	Cliff Swallow									6				6
?SWA	Unidentified Swallow								8					8
BRTI	Bridled Titmouse								9(2)					9
JUTI	Juniper Titmouse				1									1
VERD	Verdin				3(3)				1					4
BUSH	Bushtit				1									1
CACW	Cactus Wren				2(2)				2(2)	1				4
ROWR	Rock Wren				4(2)					1				5
BEWR	Bewick's Wren								1	1				2
RCKI	Ruby-crowned Kinglet				6(4)				1					7
TOSO	Townsend's Solitaire				2(2)									2
NOMO	Northern Mockingbird				2(2)	1								3
EUST	European Starling				7(4)	1								8
PHAI	Phainopepla					5(3)			2	3(2)				10
OCWA	Orange-crowned Warbler				1									1
LUWA	Lucy's Warbler				8(3)									8
YWAR	Yellow Warbler				10(4)	2			3(3)					15
YRWA	Yellow-rumped Warbler				9(3)									9
WIWA	Wilson's Warbler					2(2)				1				3
SUTA	Summer Tanager					7(4)			7(4)	1				15
WETA	Western Tanager				1				1	1				3
GTTO	Green-tailed Towhee				1									1
CANT	Canyon Towhee				1									1
RCSP	Rufous-crowned Sparrow				1									1
CHSP	Chipping Sparrow				22(3)				1					23
LASP	Lark Sparrow					2								2
BTSP	Black-throated Sparrow				6(2)				6					12
LISP	Lincoln's Sparrow				7(3)									7
WCSP	White-crowned Sparrow				4									4
NOCA	Northern Cardinal				10(5)	1			5(4)	1				17
BHGR	Black-headed Grosbeak								9(4)					9
BLGR	Blue Grosbeak								3(3)	1				4
BROC	Bronzed Cowbird				2									2

BHCO	Brown-headed Cowbird					1								1
BUOR	Bullock's Oriole				1									1
?ORI	Unidentified Oriole								2					2
HOFI	House Finch				12(6)	2(2)			7(2)	8				29
LEGO	Lesser Goldfinch				12(2)	3			27(6)					42
MUDE	Mule Deer								1					1

Notes: First number is total # of birds seen, number in ( ) how many times species was observed. ex 3(3) = 3 singles , 8(1) = flock of 8

Data sets

2865	4/14/2007	AGF_SET
3568	5/17/2007	AGF_SET
3572	8/18/2007	AGF_SET
3586	9/15/2007	AGF_SET

Agua Fria National Monument - Perry Mesa Uplands
by Tice Supplee

This AREA SEARCH Survey is established at three one quarter hectare square plots. Two plots are located on the north and south sides of Bloody Basin Road at Double Tanks. The third plot is located at the junction of Bloody Basin Road and road 140 and straddles the fence with the Tonto National Forest. Access to these plots is from I-17 Exit 259, Bloody Basin Road. Proceed east and south past Horseshoe Ranch and cross the Agua Fria River. Proceed east up the hill and at the cattle guard is the spot to park and the Perry Mesa grasslands plots are on the north and south side of the road. Access to these plots is dependent upon road conditions. High water closes the access at Horseshoe Ford. The road 140 plot is not accessible during severe wet conditions. The road is best suited for a high clearance vehicle, although passable with a sedan in dry conditions.
At the north edge of the north plot are Double Tanks. These two plots are Tobosa grasslands with acacia shrubs interspersed. The pasture is called "Double Tanks" and is lightly grazed by cattle. A few pronghorn antelope are often observed when conducting these plots. The Perry Mesa plot on the south side of Bloody Basin Road had Cassin's Sparrows skylarking in August of 2005, a year with good moisture in early summer. August 2006 Area Search yielded no Cassin's Sparrows.

Continue east on the Bloody Basin road to road 140 and park after making the turn and driving down the hill. The plot straddles the road and the vegetation includes a small desert hackberry woodland that burned in a 2005 fire. The remainder of the plot has a wash that runs through with hackberry and juniper. The slopes are tobosa grass, juniper, acacia and a small stand of turbinella oak on the south edge of the plot on the slopes above the wash. The site overall can best be described as xeric desert wash with juniper grasslands and chaparral and desert scrub upland. This diverse ecotone site is a migrant trap in the spring. Spring 2006 surveys at the road 140 plot were most notable for the diversity of migrant warblers gleaning from the flowering acacia and mesquite.

These three plots have been surveyed with teams of three to four individuals walking parallel within verbal communication distance to reduce chances of a double count and covering the plot in two sweeps. Each plot can be run in this manner in approximately one hour survey time each.

Perry Mesa One Corner point coordinates NAD27 UTM:
1: 34. 236610°/ -112.037142°
2: 34.232180°/ -112.03763°
3: 34. 230230°/ -112.032030°
4: 34. 234880°/ -112.032200°

Perry Mesa Two (Double Tanks) Corner point coordinates NAD27 UTM:
1: 34. 235900°/ -112.030210°
2: 34. 240190°/ -112.029170°
3: 34. 240110°/ -112.023730°
4: 34. 233780°/ -112.023540°

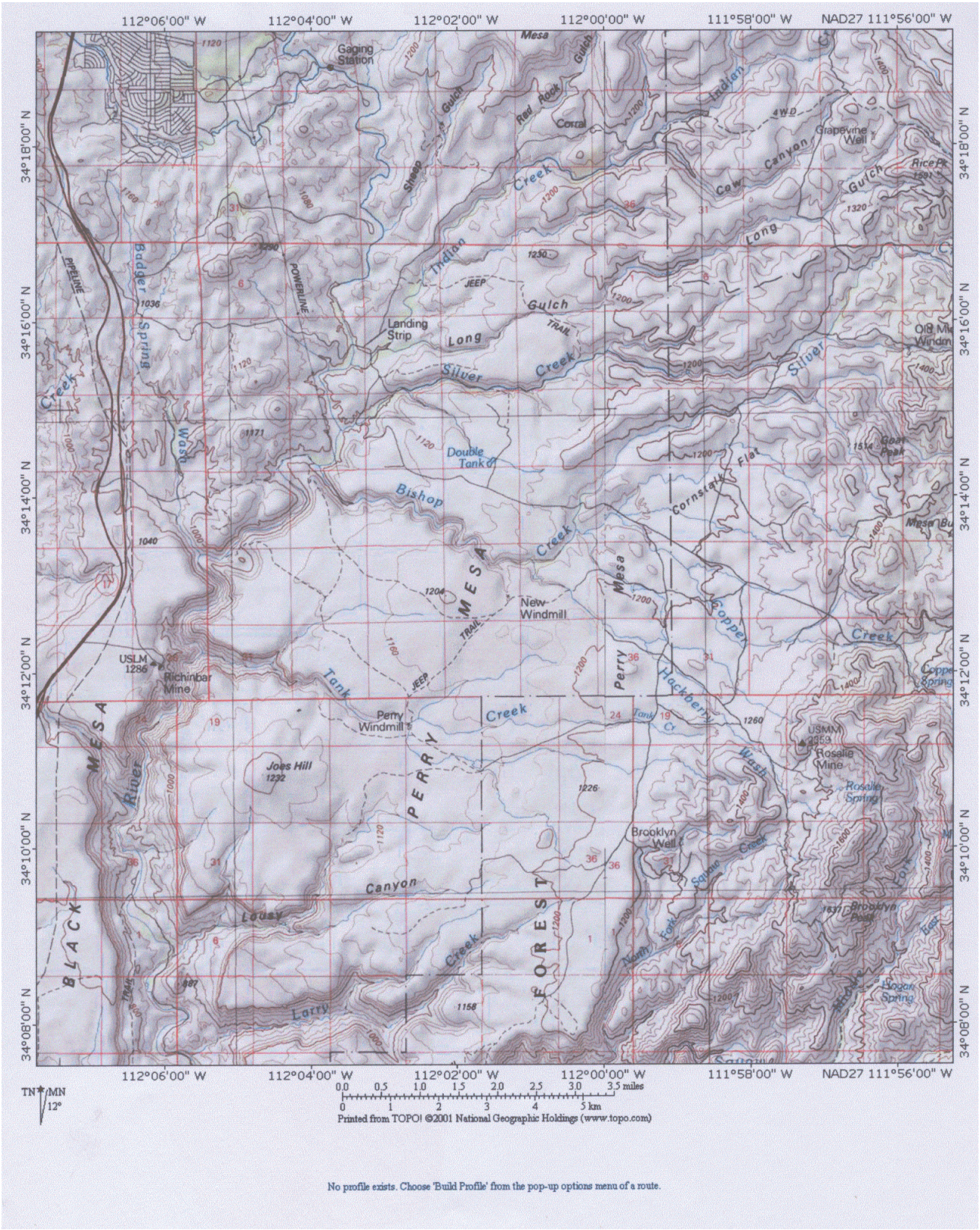
Perry Mesa Three Corner point coordinates NAD27 UTM:
1: 34. 225190°/ -112.990620°
2: 34. 220480°/ -112.988590°
3: 34. 220380°/ -112.983450°
4: 34. 224280°/ -112.984380°

Point Count Coordinates

Database record	Point number		Coordinates
AGF_PMPC1	68	403607	3789105
AGF_PMPC2	69	403827	3788845
AGF_PMPC3	70	403828	3788845
AGF_PMPC4	71	404121	3788734
AGF_PMPC5	72	404446	3788685
AGF_PMPC6	73	404855	3788755
AGF_PMPC7	74	405281	3788526
AGF_PMPC8	75	405636	3788369
AGF_PMPC9	76	405994	3788219
AGF_PMPC10	77	406408	3788108
AGF_PMPC11	78	407344	3788120
AGF_PMPC12	79	407931	3788125
AGF_PMPC13	80	408702	3787677
AGF_PMPC14	81	409039	3787021
AGF_PMPC15	82	409158	3786267
AGF_PMPC16	83	409172	3785389
AGF_PMPC17	84	-	-

Perry Mesa – Along Road where Point Counts are conducted – Spring 2006

View of Mesa – Aug 2006



Relief map of Perry Mesa

Perry Mesa Point Counts 1 2007 - 23 species

Code	Common Name	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	Totals
GAQU	Gambel's Quail				1	1		1					4(2)	1	2(2)			10
/wEWkwYC5NLF2\	lawk				1	1							1			/wEW3AECq8mpu		
	estrel	1																1
PRFA	Prairie Falcon					1												1
MODO	Mourning Dove				5(3)	2		1	1				2			2(2)	3(2)	18
BLSW	Black Swift						1											1
ATFL	Ash-throated Flycatcher														1			1
WEKI	Western Kingbird												2		1			3
BEVI	Bell's Vireo															1		1
STJA	Steller's Jay															1		1
CORA	Common Raven												1		4(3)			5
HOLA	Horned Lark							1						2			2	5
CACW	Cactus Wren											1		2(2)				3
NOMO	Northern Mockingbird						1	2	1		2(2)	2(2)	1	2(2)	1	4(2)	1	17
CBTH	Curve-billed Thrasher					1												1
PHAI	Phainopepla												2(2)			1		3
OCWA	Orange-crowned Warbler																1	1
WIWA	Wilson's Warbler															1		1
BRSP	Brewer's Sparrow																10	10
LASP	Lark Sparrow																1	1
BTSP	Black-throated Sparrow	1	2(2)	4(3)	3(3)	6(6)	1	8(5)	2(2)	6(5)	4(2)	2(2)		2	2(2)	2(2)	2(2)	47
?MEA	Unidentified Meadowlark									1							2	3
SCOR	Scott's Oriole					1												1

Data sets

3549	5/15/2007	AGF_PMPC1
3550	5/15/2007	AGF_PMPC2
3551	5/15/2007	AGF_PMPC3
3552	5/15/2007	AGF_PMPC4
3553	5/15/2007	AGF_PMPC5
3554	5/15/2007	AGF_PMPC6
3555	5/15/2007	AGF_PMPC7
3556	5/15/2007	AGF_PMPC8
3557	5/15/2007	AGF_PMPC9
3558	5/15/2007	AGF_PMPC10
3559	5/15/2007	AGF_PMPC11
3560	5/15/2007	AGF_PMPC12
3561	5/15/2007	AGF_PMPC13
3562	5/15/2007	AGF_PMPC14
3563	5/15/2007	AGF_PMPC15
3564	5/15/2007	AGF_PMPC16

Perry Mesa Area Search 1 2007 - 25 species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
GAQU	Gambel's Quail				5(3)	1			3					9
RTHA	Red-tailed Hawk					1								1
WWDO	White-winged Dove					8								8
MODO	Mourning Dove				9(5)	5(4)			1					15
?HUM	Unidentified Hummingbird								1					1
LBWO	Ladder-backed Woodpecker				1									1
ATFL	Ash-throated Flycatcher					1								1
WEKI	Western Kingbird					14(8)								14
LOSH	Loggerhead Shrike				2(2)	2(2)								4
CORA	Common Raven								1					1
VGSW	Violet-green Swallow				6(4)									6
NOMO	Northern Mockingbird					3(2)								3
CBTH	Curve-billed Thrasher				1									1
WETA	Western Tanager								2					2
GTTO	Green-tailed Towhee				1	2								3
CANT	Canyon Towhee				1									1
ABTO	Abert's Towhee				4(3)									4
CHSP	Chipping Sparrow				10(2)	1			5(3)					16
BRSP	Brewer's Sparrow				175(12)	143(15)								318
LASP	Lark Sparrow				6(2)	13(6)			13(6)					32
BTSP	Black-throated Sparrow				8(4)	13(6)			9(6)					30
LARB	Lark Bunting								1					1
LISP	Lincoln's Sparrow				5(2)									5
WCSP	White-crowned Sparrow				81(16)	24(4)								105
WEME	Western Meadowlark				9(6)	1			1					11

Notes: First number is total # of birds seen, number in ( ) how many times species was observed. ex 3(3) = 3 singles , 8(1) = flock of 8

Data sets

3537	4/17/2007	AGF_PMAS1
3540	5/2/2007	AGF_PMAS1
3547	8/10/2007	AGF_PMAS1

Perry Mesa Area Search 2 2007 - 13 species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
WWDO	White-winged Dove					1								1
MODO	Mourning Dove				19(7)	22(12)								41
WEKI	Western Kingbird				2	1								3
LOSH	Loggerhead Shrike				1									1
VGSW	Violet-green Swallow				6(4)									6
NOMO	Northern Mockingbird					2								2
CANT	Canyon Towhee					2								2
CHSP	Chipping Sparrow				2									2
BRSP	Brewer's Sparrow				179(25)	153(22)								342
LASP	Lark Sparrow				2	10(4)								12
BTSP	Black-throated Sparrow				12(6)	10(7)								22
WCSP	White-crowned Sparrow				125(21)	40(15)								165
WEME	Western Meadowlark				3(3)	3(3)								6

Notes: First number is total # of birds seen, number in ( ) how many times species was observed. ex 3(3) = 3 singles , 8(1) = flock of 8

Data sets

3538	4/17/2007	AGF_PMAS2
3541	5/2/2007	AGF_PMAS2

Perry Mesa Area Search 3 2007 - 32 species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
NSHO	Northern Shoveler				1									1
GAQU	Gambel's Quail				5(2)	1			3					9
TUVU	Turkey Vulture				1	2(2)								3
SSHA	Sharp-shinned Hawk				1									1
RTHA	Red-tailed Hawk					1			1					2
AMKE	American Kestrel								1					1
WWDO	White-winged Dove					3(2)								3
MODO	Mourning Dove				7(3)	10(5)			1					18
GRRO	Greater Roadrunner					1								1
GRFL	Gray Flycatcher				2(2)	1								3
ATFL	Ash-throated Flycatcher				1									1
LOSH	Loggerhead Shrike				3(3)									3
WESJ	Western Scrub-Jay				1									1
CORA	Common Raven				2(2)	2(2)								4
VERD	Verdin					1			1					2
BUSH	Bushtit				8(2)									8
BEWR	Bewick's Wren				3(2)	1								4
HOWR	House Wren				1									1
BGGN	Blue-gray Gnatcatcher				1									1
NOMO	Northern Mockingbird				4(4)	1								5
PHAI	Phainopepla				1									1
SUTA	Summer Tanager					1								1
GTTO	Green-tailed Towhee				6(5)	1								7
CANT	Canyon Towhee					3(2)								3
ABTO	Abert's Towhee								1					1
CHSP	Chipping Sparrow				1									1
BRSP	Brewer's Sparrow				51(10)									51
BTSP	Black-throated Sparrow				4(3)	6(4)			2					12
WCSP	White-crowned Sparrow				107(20)									107
NOCA	Northern Cardinal				1	1								2
WEME	Western Meadowlark				3(2)									3
BHCO	Brown-headed Cowbird					2(2)								2

Notes: First number is total # of birds seen, number in ( ) how many times species was observed. ex 3(3) = 3 singles , 8(1) = flock of 8

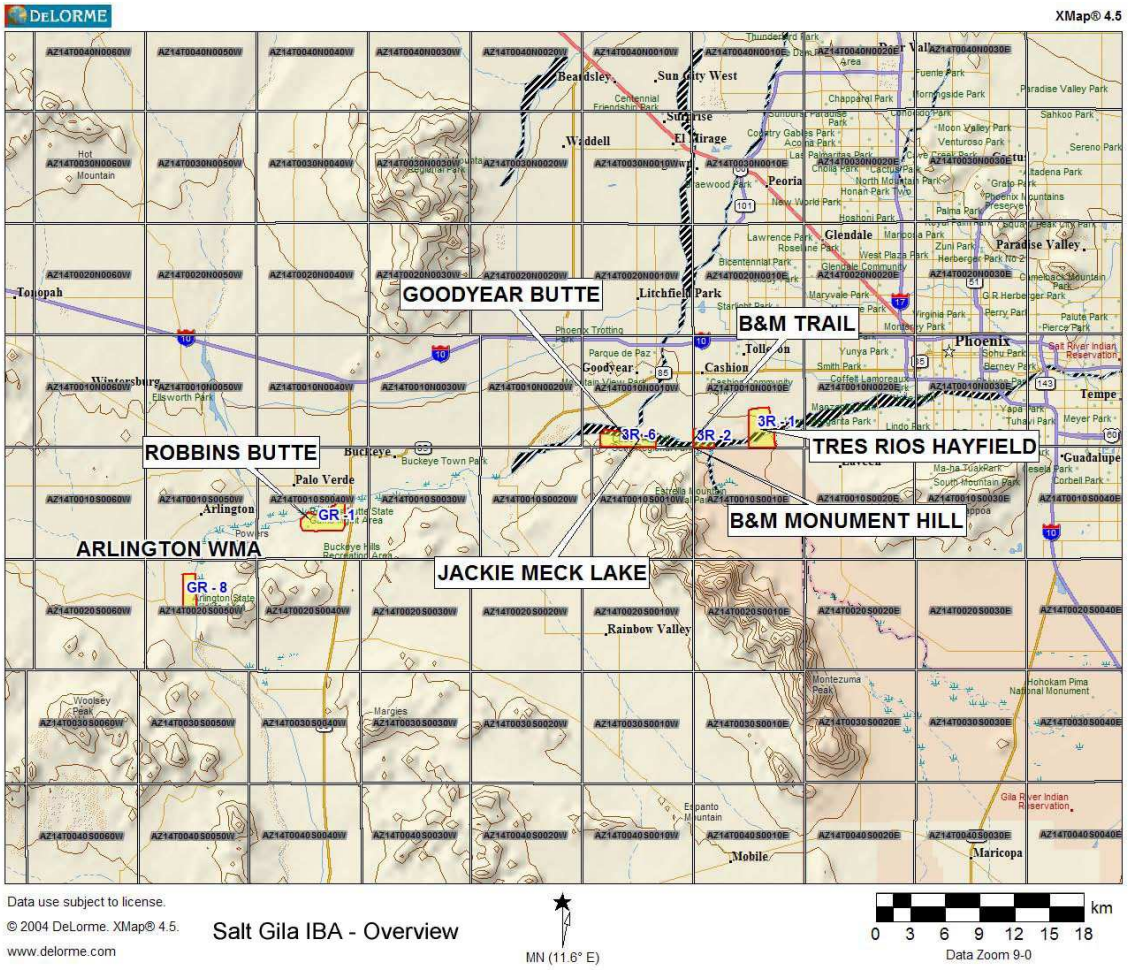
Data sets

3539	4/17/2007	AGF_PMAS3
3546	5/2/2007	AGF_PMAS3
3548	8/10/2007	AGF_PMAS3

Salt & Gila River Systems

Census surveys were used on the Lower Salt and Gila River systems. One Area Search was also used at the Tres Rios Hayfield Site. A Transect has been proposed for the B&M site that runs to the west of the old river crossing along the trail constructed for the Tres Rios Nature Festival but this transect has never been finalized.

Census surveys were conducted at the B&M site, Jackie Meck Lake, Robbins Butte, Arlington, and at three ponds in the Tres Rios Hayfield site Area.



2007 Salt / Gila IBA
Sonoran Audubon Society IBA Bird Count Hours and miles

Census: Arlington Ponds

Date	Counter	Agency	Hours on Project	Miles
3/12/2007	Frank Insana	SAS	4.5	105
	Tice Supplee	AAZ	4.5	105
4/8/2007	Frank Insana	SAS	4.45	84
	Tice Supplee	AAZ	4	84
4/17/2007	Tice Supplee	AAZ	4	105
4/20/2007	Frank Insana	SAS	3	134
4/28/2007	Frank Insana	SAS	3	115
	Tice Supplee	AAZ	3	115
5/28/2007	Frank Insana	SAS	3	115
		Total	33.9	962

Census: Jackie Meck Lake

Date	Counter	Agency	Hours on Project	Miles
1/20/2007	Robert A. McCormick	SAS	4	39
3/25/2007	Robert A. McCormick	SAS	2.5	39
5/20/2007	Robert A. McCormick	SAS	3	39
8/5/2007	Robert A. McCormick	SAS	2.75	40
9/8/2007	Robert A. McCormick	SAS	2.5	38
		Total	14.75	195

Census: B&M

Date	Counter	Agency	Hours on Project	Miles
1/21/2007	Robert A. McCormick	SAS	2.25	28
	Dick Fogle	SAS	2.5	46
3/24/2007	Robert A. McCormick	SAS	3	29
	Rich Schooler	SAS	3	30
8/23/2007	Rich Schooler	SAS	3.5	30
	Carol Schooler	SAS	3.5	30
10/16/2007	Rich Schooler	SAS	3.5	30
	Carol Schooler	SAS	3.5	30
		Total	24.75	253

Census: Robbins Butte

Date	Counter	Agency	Hours on Project	Miles
4/14/2007	Andre Tarby	SAS	2	128
	Rachel Smith	SAS	2	98
	Carl Vasil	SAS	2	98
3/25/2007	Andre Tarby	SAS	2	102
4/15/2007	Tice Supplee	AAS	1.5	102
5/16/2007	Andre Tarby	SAS	4.1	132
	Frank Insana	SAS	3.75	102
	Tice Supplee	AAZ	3.75	102
		Total	21.1	864

Census: Tres Rios

Date	Counter	Agency	Hours on Project	Miles
1/21/2007	Daniela Yellan	SAS	3.75	56
	Andre Tarby	SAS	3.75	56
	Frank Insana	SAS	3.75	52
		Total	11.25	164
	Grand Total for the 4 count areas		**105.75**	**2438**

Notes: 10 different counters made 20 visits

SAS - Sonoran Audubon, AAZ - Audubon Arizona

Summary – Salt / Gila river Systems – 2007 – 107 species

		Jackie Meck	Tres Rios	Robbins Butte	B&M	Arlington	Totals
CAGO	Canada Goose	18	6	-	-	-	24
GADW	Gadwall	5	-	-	-	-	5
AMWI	American Wigeon	10	-	-	-	-	10
WODU	Wood Duck	-	1	-	-	-	1
MALL	Mallard	53	102	3	13	62	233
MALLM	Mallard (Mexican subspecies)	-	-	-	-	1	1
BWTE	Blue-winged Teal	-	-	-	-	11	11
CITE	Cinnamon Teal	12	1	1	-	93	107
LESC	Lesser Scaup	-	-	5	-	-	5
NSHO	Northern Shoveler	44	4	-	1	3	52
REDH	Redhead	4	-	-	-	-	4
GWTE	Green-winged Teal	-	83	-	-	3	86
?TEA	Unidentified Teal	-	-	-	5	-	5
RNDU	Ring-necked Duck	19	3	-	27	-	49
COME	Common Merganser	2	-	-	-	4	6
RUDU	Ruddy Duck	16	8	-	-	-	24
GAQU	Gambel's Quail	15	11	2	-	128	156
PBGR	Pied-billed Grebe	13	1	4	44	-	62
NECO	Neotropic Cormorant	14	36	11	75	-	136
DCCO	Double-crested Cormorant	46	40	39	28	-	153
?COR	Unidentified Cormorant	54	-	-	117	-	171
LEBI	Least Bittern	-	-	2	1	-	3
GBHE	Great Blue Heron	33	6	10	20	7	76
GREG	Great Egret	26	14	36	35	10	121
SNEG	Snowy Egret	122	3	131	101	42	399
GRHE	Green Heron	8	1	5	25	-	39
BCNH	Black-crowned Night-Heron	13	2	5	10	16	46
WFIB	White-faced Ibis	54	390	-	35	1	480
TUVU	Turkey Vulture	-	-	2	2	-	4
OSPR	Osprey	4	2	4	2	-	12
NOHA	Northern Harrier	1	1	-	2	2	6
COHA	Cooper's Hawk	-	-	-	1	3	4
RTHA	Red-tailed Hawk	2	2	1	-	1	6
?HAW	Unidentified Hawk	-	-	-	1	-	1
AMKE	American Kestrel	1	-	-	-	-	1
?FAL	Unidentified Falcon	1	-	-	-	-	1
CLRA	Clapper Rail (Yuma)	-	-	-	-	30	30
VIRA	Virginia Rail	1	-	2	1	1	5
?RAI	Unidentified Rail	2	-	-	-	-	2
SORA	Sora	-	-	-	-	2	2
COMO	Common Moorhen	2	4	4	12	22	44
AMCO	American Coot	262	10	33	63	40	408
KILL	Killdeer	15	3	1	17	30	66
BNST	Black-necked Stilt	24	-	-	-	12	36
GRYE	Greater Yellowlegs	4	-	-	-	-	4
SPSA	Spotted Sandpiper	-	1	-	-	5	6
LESA	Least Sandpiper	11	-	-	-	11	22
LBDO	Long-billed Dowitcher	5	-	-	-	3	8
WISN	Wilson's Snipe	-	-	-	-	8	8
BLTE	Black Tern	-	-	-	-	1	1
ROPI	Rock Pigeon	-	-	-	6	-	6
WWDO	White-winged Dove	302	-	18	15	159	494
MODO	Mourning Dove	254	14	61	30	237	596
GRRO	Greater Roadrunner	-	-	-	3	2	5
GHOW	Great Horned Owl	-	-	1	-	-	1
LENI	Lesser Nighthawk	-	-	41	-	1004	1045
BCHU	Black-chinned Hummingbird	-	-	-	1	2	3
ANHU	Anna's Hummingbird	1	-	-	2	1	4
COHU	Costa's Hummingbird	-	-	-	-	2	2
?SEL	Unidentified Selasphorus sp. (BTLH, RUHU, ALHU)	1	-	-	-	-	1
BEKI	Belted Kingfisher	5	-	2	9	-	16
GIWO	Gila Woodpecker	2	4	2	2	2	12
LBWO	Ladder-backed Woodpecker	-	6	-	2	2	10

NOFL	Northern Flicker	2	3	-	4	-	9
BLPH	Black Phoebe	1	2		6	2	11
ATFL	Ash-throated Flycatcher	-	-	2	-	-	2
CAKI	Cassin's Kingbird	-	-	1	-	-	1
WEKI	Western Kingbird	-	-	5	-	1	6
HUVI	Hutton's Vireo	-	-	-	-	1	1
NRWS	Northern Rough-winged Swallow	-	-	-	-	95	95
NRWS	Northern Rough-winged Swallow	-	-	37	23	368	428
BANS	Bank Swallow	-	-	6		1	7
CLSW	Cliff Swallow	-	-	15	200	275	490
BARS	Barn Swallow	-	-	-	-	32	32
?SWA	Unidentified Swallow	58	-	-	-	-	58
CORA	Common Raven	-	2	-	-	-	2
VERD	Verdin	4	4	1	8	-	17
CBTH	Curve-billed Thrasher	-	-	1	-	-	1
ROWR	Rock Wren	3	-	-	1	-	4
CANW	Canyon Wren	1	-	-	-	-	1
MAWR	Marsh Wren	4	7	-	16	26	53
AMPI	American Pipit	-	-	-	-	1	1
RCKI	Ruby-crowned Kinglet	-	11	-	1	-	12
BTGN	Black-tailed Gnatcatcher	-	-	-	5	-	5
EUST	European Starling	-	34	-	-	-	34
OCWA	Orange-crowned Warbler	-	3	-	11	8	22
LUWA	Lucy's Warbler	-	-	4	-	-	4
YWAR	Yellow Warbler	-	1	-	-	4	5
YRWA	Yellow-rumped Warbler	-	15	-	45	12	72
TOWA	Townsend's Warbler	-	-	-	-	1	1
COYE	Common Yellowthroat	4	-	4	4	56	68
WIWA	Wilson's Warbler	-	-	5	-	27	32
YBCH	Yellow-breasted Chat	-	-	4	-	-	4
ABTO	Abert's Towhee	5	20	7	19	78	129
RWSP	Rufous-winged Sparrow	-	-	-	-	42	42
FOSP	Fox Sparrow	-	-	-	1	-	1
CHSP	Chipping Sparrow	-	-	-	-	15	15
BRSP	Brewer's Sparrow	-	-	-	-	10	10
SOSP	Song Sparrow	2	5	6	11	129	153
LISP	Lincoln's Sparrow	-	2	-	6	6	14
WCSP	White-crowned Sparrow	4	5	-	9	338	356
LAZB	Lazuli Bunting	-	-	-	-	3	3
NOCA	Northern Cardinal	2	1	1	1	-	5
RWBL	Red-winged Blackbird	273	-	3537	2641	8767	15218
YHBL	Yellow-headed Blackbird	46	-	1880	-	652	2578
GTGR	Great-tailed Grackle	62	34	-	84	90	270
BROC	Bronzed Cowbird	-	-	-	-	59	59
BHCO	Brown-headed Cowbird	-	-	-	23	142	165
HOFI	House Finch	-	-	4	4	38	46
LEGO	Lesser Goldfinch	2	-	-	-	1	3
HOSP	House Sparrow	4	-	-	-	-	4
COYO	Coyote	2	-	-	-	-	2
/wEW1wEC+LqVp		-	-	1	1	-	2

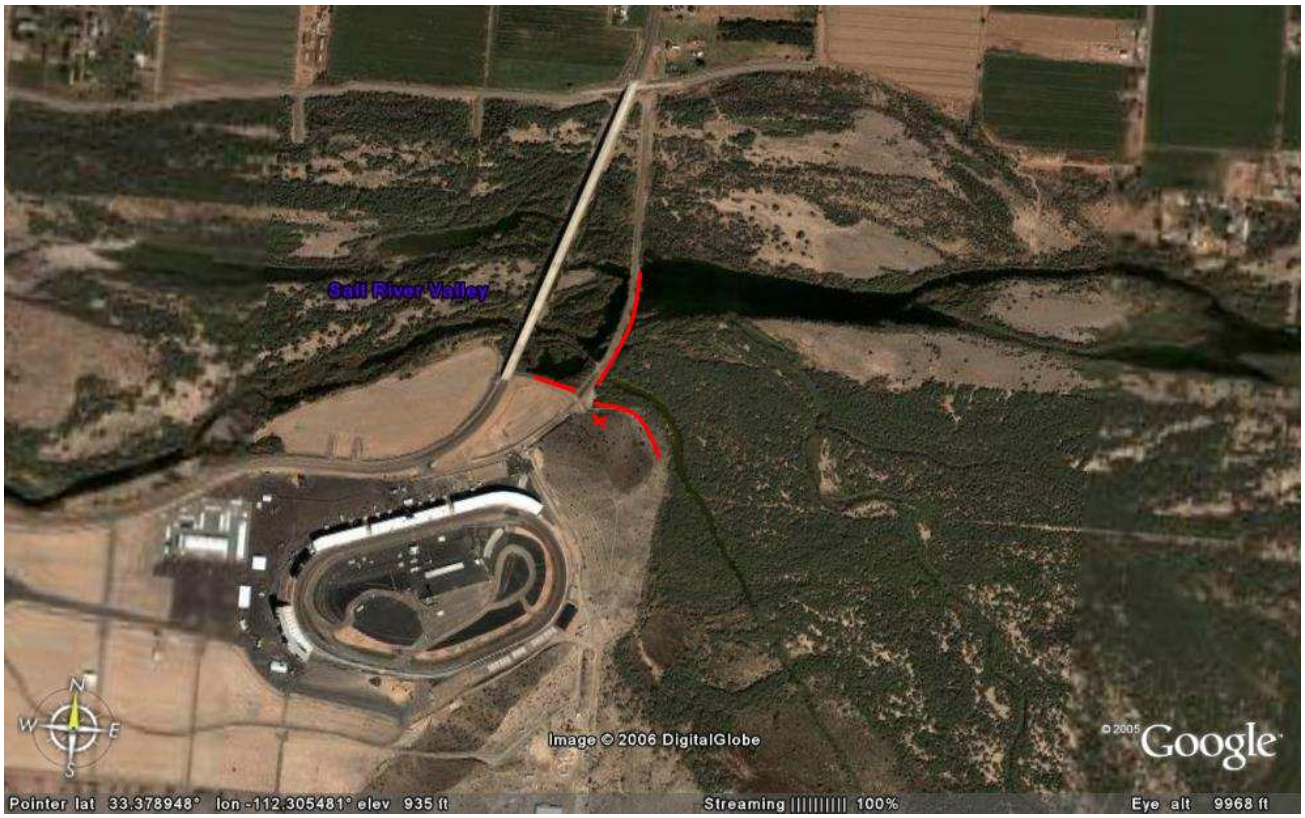
Salt Gila - B&M Wildlife Area
by Bob McCormick

This CENSUS Survey is located at the South End of the 115th Ave Bridge as it reaches Phoenix International Raceway. Parking is located at the first left into PIR and follow it to the East to the parking lot. Several locations on the B&M hill have been tried as vantage points and none have proved acceptable. The site is located where the Gila River channel enters the Salt River Channel. A large pond is formed on the East side of the old 115th Ave road through the river channel. The West side is running river channels with healthy reeds, and mature cottonwoods. The upstream portion of the Gila River Channel and the South side of the Salt River Bank are clogged with Salt Cedar. As usual surrounding areas are desert scrub.

This site is very difficult to do as a Census survey as the hill is set away from the river channel. Good views are afforded of the valley in general but about a ¼ - ½ mile stretch of Salt Cedar separates the viewer from the river channel. The first survey for 2007 will be done as an Area Search in three legs. The West Levee to view the moving river portion and large trees, the East Levee to view the Gila Channel, and the old 115th Ave to view the Salt river channel and pond. Other concerns at this location include some of the other users of the area. While the majority are great people, frequent gunfire has been heard very close by. Trash is also a problem.

This spot is a favorite of fishermen both Human and Avian. Kingfishers, Osprey and Cormorants are always seen. Few ducks are seen at this site, possibly due to the heavy use by the human fishermen. Marsh birds are very common and huge flocks of blackbirds roost in the reeds. Several Heron Rookeries are located on the North side of the Salt River. The raceway appears to have no affect on the bird activity in the area. It appears that the birds could care less if it was there or not.

West Levee looking North old 115th is to right – Photo taken in 2006



B&M Wildlife area. The red X denotes the census point which has been dropped since the coverage of the area was poor. The red lines denote the West Levee, East Levee, and Old 115th Ave Area Searches which will be used for the 2007 surveys.

B&M Wildlife Area Area Search 2007 – 55 Species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
MALL	Mallard	2		9					2					13
?TEA	Unidentified Teal			5										1
NSHO	Northern Shoveler	1												5
RNDU	Ring-necked Duck			24								3		27
PBGR	Pied-billed Grebe	19		16					2			7		44
NECO	Neotropic Cormorant	2		33								40		75
DCCO	Double-crested Cormorant	4							7			17		28
?COR	Unidentified Cormorant	88		29										117
LEBI	Least Bittern								1					1
GBHE	Great Blue Heron	1		7					4			8		20
GREG	Great Egret	19		7					6			3		35
SNEG	Snowy Egret	76		14					3			8		101
GRHE	Green Heron	3		4					10			8		25
BCNH	Black-crowned Night-Heron	1		3					2			4		10
WFIB	White-faced Ibis			35										35
TUVU	Turkey Vulture								2					2
OSPR	Osprey	1										1		2
NOHA	Northern Harrier	1							1					2
COHA	Cooper's Hawk	1												1
?HAW	Unidentified Hawk	1												1
VIRA	Virginia Rail	1												1
COMO	Common Moorhen	5		3								4		12
AMCO	American Coot	15		209					5			14		63
KILL	Killdeer								14			3		17
ROPI	Rock Pigeon	2							1			3		6
WWDO	White-winged Dove								15					15
MODO	Mourning Dove	2		5					22			1		30
GRRO	Greater Roadrunner								1			2		3
BCHU	Black-chinned Hummingbird			1										1
ANHU	Anna's Hummingbird											2		2
BEKI	Belted Kingfisher	3		1								5		9
GIWO	Gila Woodpecker	1										1		2
LBWO	Ladder-backed Woodpecker	1							1					2
NOFL	Northern Flicker	2										2		4
BLPH	Black Phoebe			1					1			4		6
CLSW	Cliff Swallow			200										23
NRWS	Northern Rough-winged Swallow											23		200
VERD	Verdin			1					4			3		8
ROWR	Rock Wren	1												1
MAWR	Marsh Wren	7		7								2		16
RCKI	Ruby-crowned Kinglet			1										1
BTGN	Black-tailed Gnatcatcher	2		2					1					5
OCWA	Orange-crowned Warbler	9										2		11
YRWA	Yellow-rumped Warbler	35		10										45
	/wEWkwYC5NLF2\ellowthroat	1		1					1			1		4
	hee	3		6					5			5		19
FOSP	Fox Sparrow			1										1
SOSP	Song Sparrow			2					2			7		11
LISP	Lincoln's Sparrow	4		1								1		6
WCSP	White-crowned Sparrow			8								1		9
NOCA	Northern Cardinal			1										1
RWBL	Red-winged Blackbird	2095		530					6			10		2641
GTGR	Great-tailed Grackle	3		70					6			5		84
BHCO	Brown-headed Cowbird			3								20		23
HOFI	House Finch								3			1		4
BEAV	Beaver			1										1

Data sets

6488	1/21/2007	BMW_AS1
6489	3/24/2007	BMW_AS1
6490	8/23/2007	BMW_AS1
6491	10/16/2007	BMW_AS1

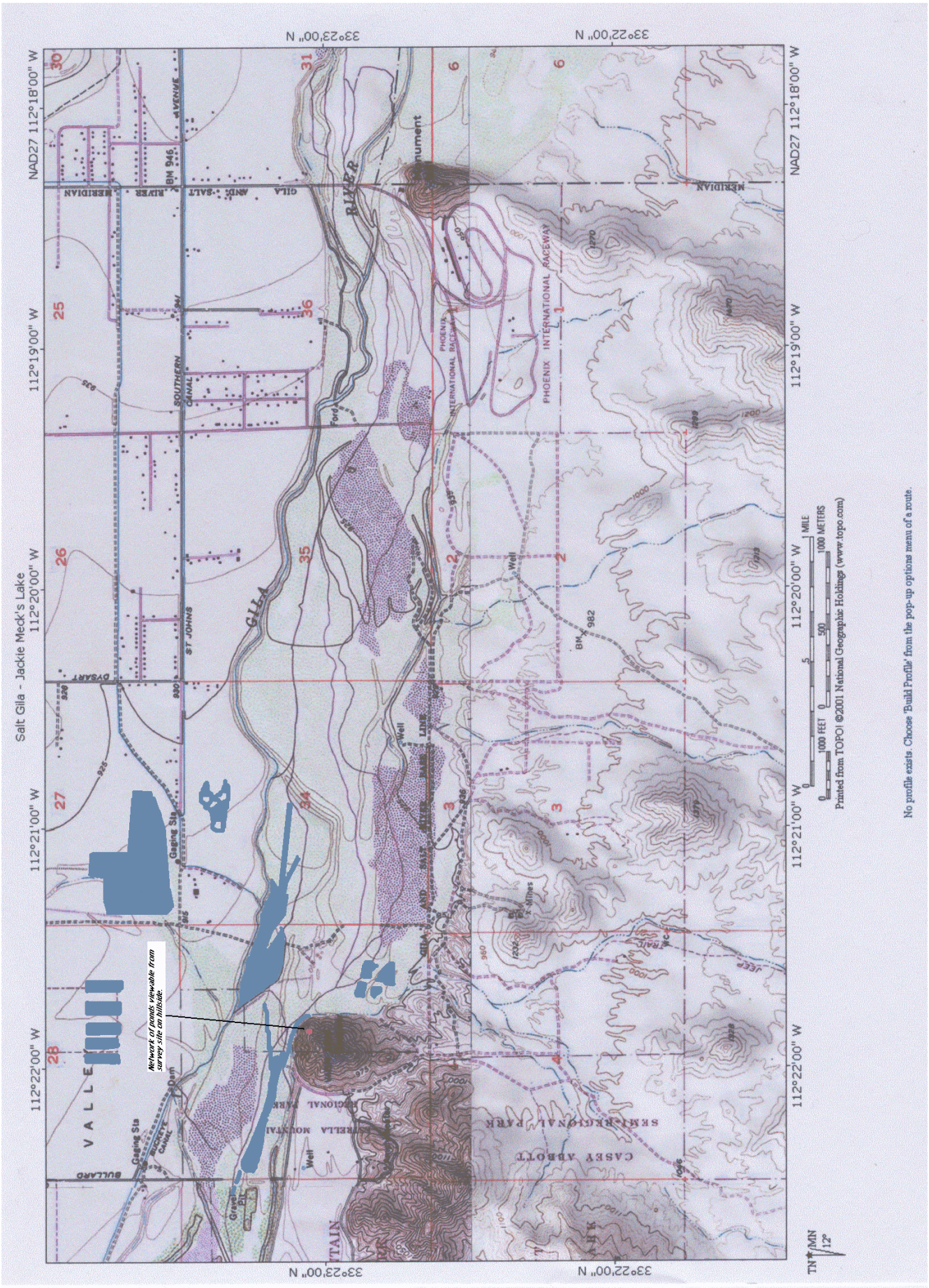
Salt Gila - Jackie Meck's Lake
by Bob McCormick

This CENSUS Survey is located at the North East corner of Estrella Mountain Regional Park on top of the hill just East of where Vineyard turns south. Parking is located at the bend in Vineyard inside the park. Parking along Vineyard may result in a fine. The Park usually waives the entry fee. A gate opens in the fence to afford crossing Vineyard. A steep ¼ mile trail leads to the top of the hill. A nice flat spot gives a great view of the lake and the many ponds to the north. An additional vantage point overlooks the canal and river as it disappears underground just before the Bullard Bridge. The Lake is approximately ¾ miles long and up to 200 yards wide. Riparian trees and reeds surround the lake. Desert scrub covers the hillside and areas adjacent to the river.

This survey was conducted three times. The two evening surveys were very enjoyable as the viewing conditions were spectacular. A 60x scope easily identifies any duck on Jackie Meck's Lake and most of the other ponds located in the gravel pits near by. Morning surveys appear not to be worth the time as by sun-up, most birds have already left and the sun reflects right off the lake making viewing very difficult.

Evening surveys at this location are very enjoyable as most of the city is in view. The sunsets can also be spectacular. Easily the biggest highlight is the White-faced Ibis coming in in the evening to roost in the lake. The March 2006 survey estimated 950 and they were still coming as I was leaving. Other birds of interest were Willets and ring-billed Gulls.

Jackie Meck's Lake – Looking East – Photo taken in 2006



Jackie Meck's Lake showing approximate pond locations – B&M Wildlife Area is to East.

Jackie Meck's Lake Census 2007 – 58 species

Code	Common Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
CAGO	Canada Goose	18												18
GADW	Gadwall			5										5
AMWI	American Wigeon	6		4										10
MALL	Mallard	5		3		18			11	16				53
CITE	Cinnamon Teal			12										12
NSHO	Northern Shoveler	16		28										44
REDH	Redhead	4												4
RNDU	Ring-necked Duck	5		14										19
COME	Common Merganser	2												2
RUDU	Ruddy Duck	14		2										16
GAQU	Gambel's Quail					2			8	5				15
PBGR	Pied-billed Grebe	7		1		2				3				13
NECO	Neotropic Cormorant									14				14
DCCO	Double-crested Cormorant	5		14		20				7				46
?COR	Unidentified Cormorant								54					54
GBHE	Great Blue Heron	5		8		11			6	3				33
GREG	Great Egret	3		10		2			3	8				26
SNEG	Snowy Egret	10		10		13			82	7				122
GRHE	Green Heron			2					5	1				8
BCNH	Black-crowned Night-Heron			4		3			3	3				13
WFIB	White-faced Ibis								35	19				54
OSPR	Osprey	1		2						1				4
NOHA	Northern Harrier	1												1
RTHA	Red-tailed Hawk	1							1					2
AMKE	American Kestrel	1												1
?FAL	Unidentified Falcon								1					1
VIRA	Virginia Rail								1					1
?RAI	Unidentified Rail					2								2
COMO	Common Moorhen			1					1					2
AMCO	American Coot	170		62		16			4	10				262
KILL	Killdeer	1				6			4	4				15
BNST	Black-necked Stilt	4		14		4				2				24
GRYE	Greater Yellowlegs	2		2										4
LESA	Least Sandpiper	1								10				11
LBDO	Long-billed Dowitcher	2		3										5
WWDO	White-winged Dove					100			201	1				302
MODO	Mourning Dove	9		8		200			31	6				254
ANHU	Anna's Hummingbird									1				1
?SEL	Unidentified Selasphorus sp. (BTLH, RUHU, ALHU)					1								1
BEKI	Belted Kingfisher	3		2										5
GIWO	Gila Woodpecker	1								1				2
NOFL	Northern Flicker			1					1					2
BLPH	Black Phoebe	1												1
?SWA	Unidentified Swallow			8		50								58
	/wEWkwYC5NLF2\					1			3					4
	[illegible]en					1								3
MAWR	Marsh Wren					1			3					1
ROWR	Rock Wren			1						2				4
COYE	Common Yellowthroat					1			3					4
ABTO	Abert's Towhee								2	3				5
SOSP	Song Sparrow								2					2
WCSP	White-crowned Sparrow			4										4
NOCA	Northern Cardinal					1			1					2
RWBL	Red-winged Blackbird	55		100					18					273
YHBL	Yellow-headed Blackbird	6		40		100								46
GTGR	Great-tailed Grackle			20		22			20					62
LEGO	Lesser Goldfinch								2					2
HOSP	House Sparrow								4					4
COYO	Coyote								2					2

Data sets

6043	1/20/2007	JML_C1	6754	8/5/2007	JML_C1	6252	9/8/2007	JML_SUP
6044	3/25/2007	JML_C1	6251	9/8/2007	JML_C1	6250	8/5/2007	JML_SUP
6248	5/20/2007	JML_C1						

Salt Gila - Robbins Butte
by Andree Tarby

This CENSUS Survey is located on the Robbins Butte State Wildlife Area, on the south bank of the Gila River west of State Route 85. It is accessed by taking a dirt road off SR85, then following the sign to Powers Butte and bearing right on a informal road running back toward the river on the south and west sides of Robbins Butte. The informal road is not signed and is very muddy after rain. A short hike up the Butte leads to a vantage point with good views both up and down stream and a spot to set up a scope. Footing on the butte itself is treacherous because of the steep slope and loose rock.

In the river bed itself are some stands of cottonwood, many stretches of salt cedar, and several extensive cattail marshes. The surrounding area includes a remnant of mesquite bosque and desert scrub. Evening viewing has proved to be most productive as it allows counting Great and Snowy egrets as they fly in to a rookery for the night. Ducks are not numerous on this stretch of river, but a group of Cinnamon Teal wintered here and a flock of Lesser Scaup was present in migration. Coots and mallards are present as are the other herons: Green, Great-blue, and Black-crowned Night.

Winter was significant for the high numbers of Red-winged and Yellow-headed blackbirds. Best estimates were well over 4000 Yellow-headed and approximately 3000 Red-wings roosting in the cattails. At the May Census, no Yellow-headed were present, but Red-winged persisted. A number of Lesser Nighthawks were present as well as large numbers of White-winged and Mourning doves concealed in the vegetation calling constantly. Occasional rail calls have been heard but more surveying is needed to assess their presence along this stretch of river.

Robbins Butte looking North-west – Photo taken in 2006

Salt Gila IBA - Robbin's Butte

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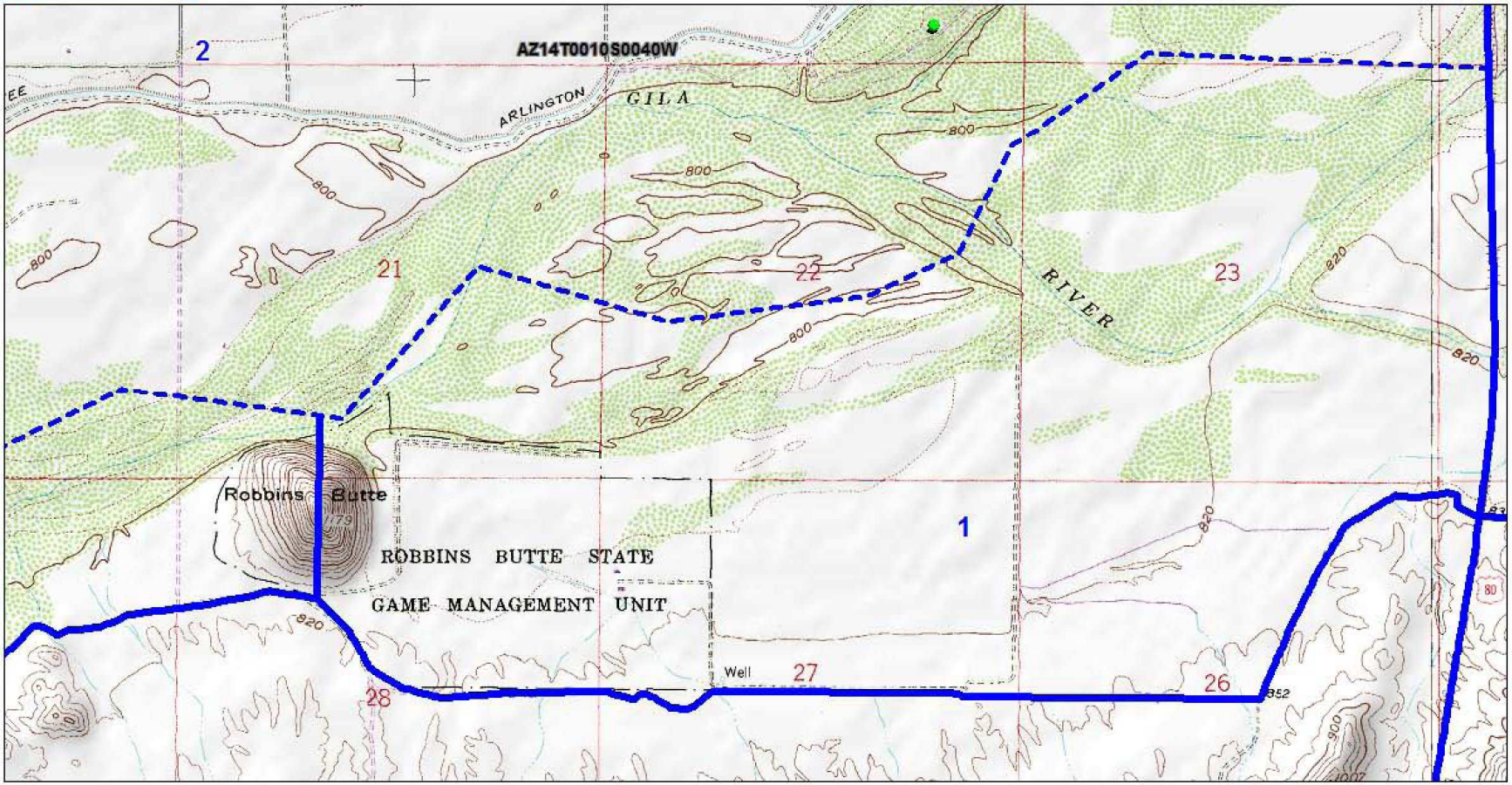

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MN (11.6° E)

0 200 400 600 800 1000 1200 1400 m

Data Zoom 13-0

Robbin's Butte Wildlife Area Census 2007 – 44 species

Code	Common Name	Jan	Feb	Mar		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
MALL	Mallard			2	1										3
CITE	Cinnamon Teal			1											1
LESC	Lesser Scaup				5										5
GAQU	Gambel's Quail					2									2
PBGR	Pied-billed Grebe			3	1										4
NECO	Neotropic Cormorant			1	10										11
DCCO	Double-crested Cormorant			6	7		26								39
LEBI	Least Bittern			1			1								2
GBHE	Great Blue Heron			9	1										10
GREG	Great Egret			10	1		25								36
SNEG	Snowy Egret			33	65		33								131
GRHE	Green Heron						5								5
BCNH	Black-crowned Night-Heron			3	1		1								5
TUVU	Turkey Vulture				2										2
OSPR	Osprey			2	2										4
RTHA	Red-tailed Hawk					1									1
VIRA	Virginia Rail			1			1								2
COMO	Common Moorhen			2	1		1								4
AMCO	American Coot			16	9	1	8								33
KILL	Killdeer						1								1
WWDO	White-winged Dove				7	20	10								18
MODO	Mourning Dove			12	7		22								61
GHOW	Great Horned Owl			1											1
LENI	Lesser Nighthawk				35		6								41
BEKI	Belted Kingfisher			2											2
GIWO	Gila Woodpecker					2									2
ATFL	Ash-throated Flycatcher					2									2
CAKI	Cassin's Kingbird					1									1
WEKI	Western Kingbird					4	1								5
NRWS	Northern Rough-winged Swallow			12	6		19								37
BANS	Bank Swallow						6								6
CLSW	Cliff Swallow						15								15
VERD	Verdin						1								1
CBTH	Curve-billed Thrasher					1									1
LUWA	Lucy's Warbler					1									4
COYE	Common Yellowthroat						4								4
WIWA	Wilson's Warbler					1	4								5
YBCH	Yellow-breasted Chat						4								4
ABTO	Abert's Towhee					1	4								7
SOSP	Song Sparrow				2		4								6
NOCA	Northern Cardinal					1									1
RWBL	Red-winged Blackbird			3080	290		167								3537
YHBL	Yellow-headed Blackbird			1730	150										1880
HOFI	House Finch					3									4
BEAV	Beaver			1											1

Data sets

6753	3/25/2007	RBW_C1
6253	4/14/2007	RBW_C1
6254	5/16/2007	RBW_C1
2761	4/15/2007	RBW_PC1
2760	4/15/2007	RBW_PC2
2759	4/18/2007	RBW_PC3

Salt Gila - Arlington Wildlife Area
by Tice Supplee

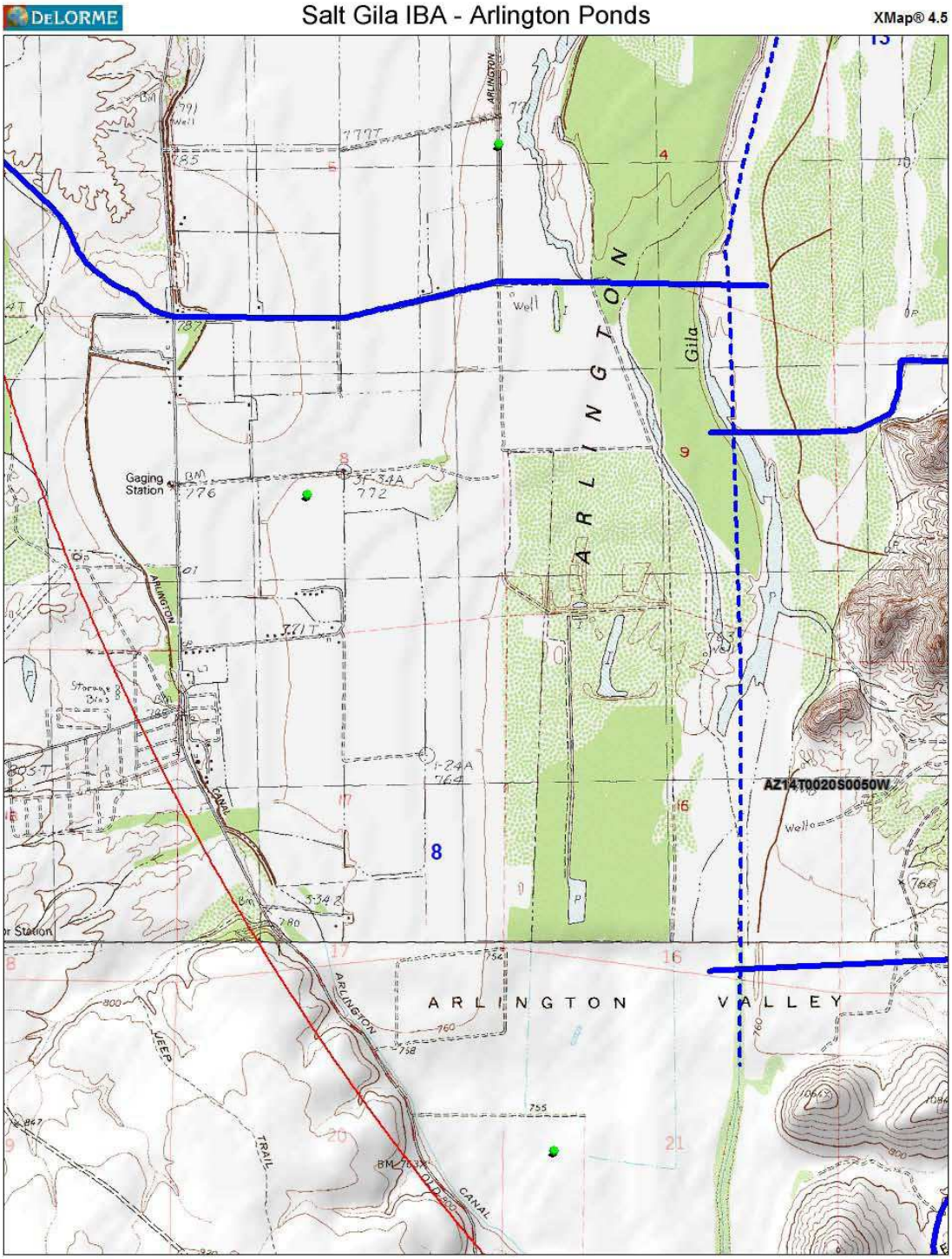
This CENSUS Survey is at the Arizona Game and Fish Department Arlington Wildlife Area located at the south end of the Arlington School Road. The site is located on the west side of the Gila River directly across from the Powers Butte Wildlife Area. The directions are I-10 west to US 85 and drive south on US 80 to Hazen Road. West on Hazen Road to "T" intersection and turn right. At next "T" turn right onto Old Highway 80. Drive west past Palo Verde, Hassayampa Store and the Arlington Post Office. Turn left or south onto Arlington School Road. Stay on road to end of pavement and continue on dirt road to the Arlington Wildlife Area white gate. Limited parking is at the gate. Walk in access is very easy. First pond is immediately past the pump house.

Census protocol is to walk south along the west side of ponds one and two and return between ponds one/two and three/four. Standard binoculars easily identified all birds on the ponds and immediately adjacent habitat. This survey was done twice during the morning. The first survey was in April within days of water being restored to the ponds that had been dry for renovation. The second survey was done a month later. Red-winged and Yellow-headed Blackbirds were using the reed habitat almost immediately. Yuma Clapper Rails were detected on two marshbird surveys conducted in April and May of 2006. The adjacent salt cedar had large numbers of calling mourning and white-winged doves during both surveys.

Survey conditions are best at this location at sunrise before the blackbirds have dispersed. The probability of detecting marshbirds and waterfowl is best at this time.

Surveys at this location have been resumed in spring 2007.

No photos available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Salt Gila IBA - Arlington Ponds
XMap® 4.5
ARLINGTON
Gila
ARLINGTON VALLEY
Gaging Station
AZ14T0020S0050W
ARLINGTON CANAL
JEEP TRAIL
OLD CANAL
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MN (11.6° E)
0 200 400 600 800 1000 1200 m
Data Zoom 13-0

Arlington Wildlife Area Census 2007 – 68 species

Code	Common Name	Jan	Feb	Mar		Apr		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
MALL	Mallard			18	2	4	15	16								55
MALLM	Mallard (Mexican subspecies)						1									1
BWTE	Blue-winged Teal				11		29									11
CITE	Cinnamon Teal			10	42	10		2								93
NSHO	Northern Shoveler						3									3
GWTE	Green-winged Teal				3											3
COME	Common Merganser				4											4
GAQU	Gambel's Quail				33	6	48	15								128
GBHE	Great Blue Heron			1	1			4								7
GREG	Great Egret				3			1								10
SNEG	Snowy Egret				4			24								42
BCNH	Black-crowned Night-Heron					4	1	10								16
WFIB	White-faced Ibis				1											1
NOHA	Northern Harrier				1		1									2
COHA	Cooper's Hawk					2										3
RTHA	Red-tailed Hawk						1									1
CLRA	Clapper Rail (Yuma)				3	14	6	6								30
VIRA	Virginia Rail						1									1
SORA	Sora						1	1								2
COMO	Common Moorhen					12	4	4								22
AMCO	American Coot				7	14	6	6								40
KILL	Killdeer			2	4	6	5	8								30
BNST	Black-necked Stilt					2	8	2								12
SPSA	Spotted Sandpiper						4									5
LESA	Least Sandpiper						11									11
LBDO	Long-billed Dowitcher				3											3
WISN	Wilson's Snipe			2	6											8
BLTE	Black Tern							1								1
WWDO	White-winged Dove				12	48	26	48								159
MODO	Mourning Dove			5	49	50	40	40								237
GRRO	Greater Roadrunner						1									2
CONI	Common Highthawk						4(1000*)									1004
BCHU	Black-chinned Hummingbird					2										2
ANHU	Anna's Hummingbird						1									1
COHU	Costa's Hummingbird						2									2
GIWO	Gila Woodpecker			1	1											2
LBWO	Ladder-backed Woodpecker				2											2
BLPH	Black Phoebe				2											2
WEKI	Western Kingbird						1									1
HUVI	Hutton's Vereo						1									1
VGSW	Violet-green Swallow						95									95
NRWS	Northern Rough-winged Swallow				37	42	275	14								368
CLSW	Cliff Swallow				9		241	25								1
BANS	Bank Swallow					1										275
BARS	Barn Swallow					1	31									32
MAWR	Marsh Wren			5	10		10									26
AMPI	American Pipit			1												1
	/wEWkwYC5NLF2\ wned Warbler				8											8
	bler				3											4
YRWA	Yellow-rumped Warbler				12											12
TOWA	Townsend's Warbler							1								1
COYE	Common Yellowthroat				8	24	6	6								56
WIWA	Wilson's Warbler							25								27
ABTO	Abert's Towhee			14	9	30	11	9								78
RWSP	Rufous-winged Sparrow					42										42
CHSP	Chipping Sparrow			15												15
BRSP	Brewer's Sparrow						10									10
SOSP	Song Sparrow			13	28	30	35	15								129
LISP	Lincoln's Sparrow			2	4											6
WCSP	White-crowned Sparrow			113	184		40									338

LAZB	Lazuli Bunting					3							3
RWBL	Red-winged Blackbird		1245	163	1250	4893	1156						8767
YHBL	Yellow-headed Blackbird			175	36	230	188						652
GTGR	Great-tailed Grackle		2	2	4	46	13						90
BROC	Bronzed Cowbird			23		19	17						59
BHCO	Brown-headed Cowbird		3	29		86	16						142
HOFI	House Finch					35							38
LEGO	Lesser Goldfinch					1							1

Data sets

6317	3/12/2007	ARW_C1
6318	4/8/2007	ARW_C1
3733	4/17/2007	ARW_C1
6319	4/17/2007	ARW_C1
6320	4/20/2007	ARW_C1
6321	4/28/2007	ARW_C1
6322	5/28/2007	ARW_C1
6323	4/28/2007	ARW_SUP

Salt Gila - Tres Rios Wetlands
by Daniela Yellan

Located north of the Gila River, adjacent to the 91st Avenue Wastewater Treatment Plant, this 25 acre demonstration wetlands was constructed in an optimum design configuration for water quality improvement and increased habitat value.

The Hayfield site is located on what was once an old agricultural field on a level terrace that is situated above the Salt River flood way and would only be subject to flood flows that are in excess of the 100 year flood.

Construction on the Hayfield Site began in the spring of 1995. Each of the sites was primarily planted with soft-stem bulrush (scripus validus) from Kingman, Arizona, and three-squared bulrush (S. olneyi) from Casa Grande, Arizona. Since 1995, over 200 live trees and seedlings have been planted.

After a few weeks, the vegetation began to undergo tremendous growth. At this time, other landscape plants were added.

After a year, the site had developed into a full wetland ecosystem. The vegetation had reached its full potential and wildlife began to call the Hayfield wetland home.

The flow of the two Hayfield basins are combined underground and discharged into a pool/riffle system (known as HS EFF) which conveys the flows into a long-standing riparian corridor. The riparian corridor is located along the south side of the site and consists of mature cottonwoods, willows, elderberry and other various deciduous trees and shrubs.

From time to time the Phoenix Fire Department conducts controlled prescribed burns of the south(west) basin for the purpose of eradicate undesirable plant species. The benefits from such prescribed burns to riparian areas and wetlands are numerous.

The following list is a short summary:

- Minimizes alteration of vegetation with the riparian and wetland areas
- Provides important inputs (debris and litter) to the water body
- Retains nutrients, sediment, and energy in the system
- Releases plant nutrients following the burn
- Makes new green shoots, roots, and rhizomes of grasses available to waterfowl
- Exposes fallen seed for waterfowl.

The Hayfield site north basin was reconfigured in the spring of 2003 to include hummocks. Hummocks are small contoured mounds that provide a gradient of water depths to control vegetation and increase the hydraulic mixing. Subsequently, by design, hummocks allow open access for mosquito control measures. The basin since then has been very closely monitored to see how depth, species selection, water chemistry, soil chemistry, and various other factors influence vegetation growth. A team of scientists from the Bureau of Reclamation, United States Department of Agriculture, U.S. Geological Survey, and Wass Gerke & Associates have been conducting this research.

Tres Rios Wetlands - East pond April 2006

Tres Rios Great Blue Heron family Photo by John Hardison

Salt Gila IBA - Tres Rios Wetlands

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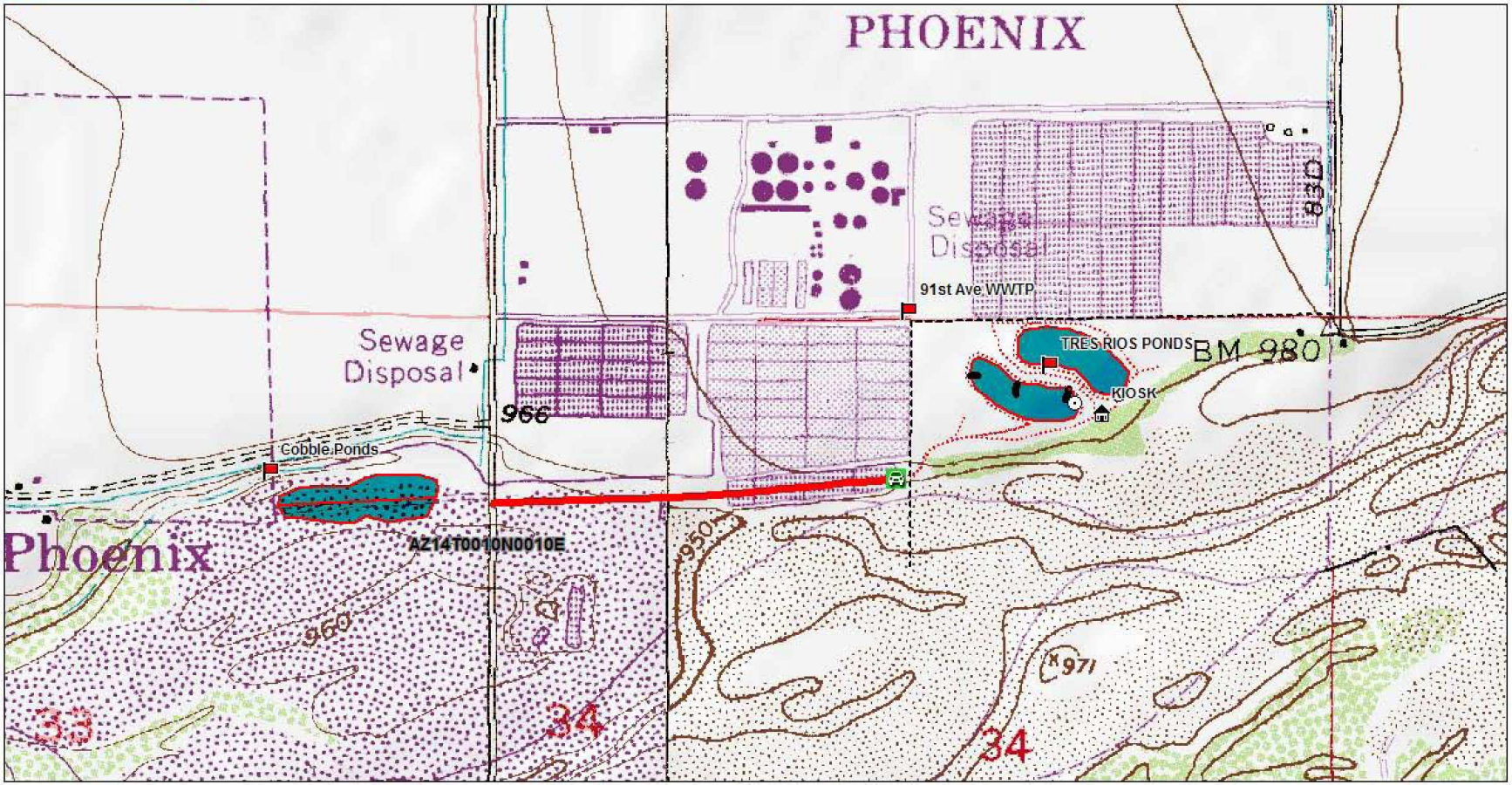

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MN (11.5° E)

0 140 280 420 560 700 m

Data Zoom 14-0

Data – Tres Rios Wetlands Area Search 2007 – 43 species

Code	Common Name	Jan	Feb 9	Mar	Apr	May 11	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
CAGO	Canada Goose	6												6
WODU	Wood Duck	1												1
MALL	Mallard	102												102
CITE	Cinnamon Teal	1												1
NSHO	Northern Shoveler	4												4
GWTE	Green-winged Teal	83												83
RNDU	Ring-necked Duck	3												3
RUDU	Ruddy Duck	8												8
GAQU	Gambel's Quail	11												11
PBGR	Pied-billed Grebe	1												1
NECO	Neotropic Cormorant	36												36
DCCO	Double-crested Cormorant	40												40
GBHE	Great Blue Heron	6												6
GREG	Great Egret	14												14
SNEG	Snowy Egret	3												3
GRHE	Green Heron	1												1
BCNH	Black-crowned Night-Heron	2												2
WFIB	White-faced Ibis	390												390
OSPR	Osprey	2												2
NOHA	Northern Harrier	1												1
RTHA	Red-tailed Hawk	2												2
COMO	Common Moorhen	4												4
AMCO	American Coot	10												10
KILL	Killdeer	3												3
SPSA	Spotted Sandpiper	1												1
MODO	Mourning Dove	14												14
GIWO	Gila Woodpecker	4												4
LBWO	Ladder-backed Woodpecker	6												6
NOFL	Northern Flicker	3												3
BLPH	Black Phoebe	2												2
CORA	Common Raven	2												2
VERD	Verdin	4												4
MAWR	Marsh Wren	7												7
RCKI	Ruby-crowned Kinglet	11												11
EUST	European Starling	34												34
OCWA	Orange-crowned Warbler	3												3
YWAR	Yellow Warbler	1												1
YRWA	Yellow-rumped Warbler	15												15
ABTO	Abert's Towhee	20												20
SOSP	Song Sparrow	5												5
LISP	Lincoln's Sparrow	2												2
WCSP	White-crowned Sparrow	5												5
NOCA	Northern Cardinal	1												1
GTGR	Great-tailed Grackle	34												34

Data sets

6344	1/21/2007	TRH_CLAS
6342	1/21/2007	TRH_EP
6343	1/21/2007	TRH_WP

Appendix I – Species Codes and Common Names
(includes mammals, reptiles, butterflies etc)

Species	Common Name	Species	Common Name	Species	Common Name
??SA	Unidentified sapsucker	BBPL	Black-bellied plover	BTJA	Black-tailed Jackrabbit
?ACC	Unidentified accipiter	BBWA	Bay-breasted warbler	BTLH	Broad-tailed hummingbird
?BUT	Unidentified buteo	BBWD	Black-bellied whistling duck	BTNW	Black-throated green warbler
?COR	Unidentified corvid	BCCH	Black-capped chickadee	BTPI	Band-tailed pigeon
?DUC	Unidentified duck	BCFL	Brown-crested flycatcher	BTSP	Black-throated sparrow
?EGR	Unidentified egret	BCHU	Black-chinned hummingbird	BTYW	Black-throated gray warbler
?FAL	Unidentified falcon	BCNH	Black-crowned night-heron	BUFF	Bufflehead
?GRA	Unidentified grackle	BCSP	Black-chinned sparrow	BUFH	Buff-bellied hummingbird
?KIN	Unidentified kingbird	BCTI	Black-crested titmouse	BUOR	Bullock's Oriole
?NIG	Unidentified nighthawk	BCVI	Black-capped vireo	BUOW	Burrowing owl
?OWL	Unidentified owl	BDOW	Barred owl	BUSH	Bushtit
?PHO	Unidentified phoebe	BEAV	Beaver	BWHA	Broad-winged hawk
?SAN	Unidentified sandpiper	BEKI	Belted kingfisher	BWTE	Blue-winged teal
?SWA	Unidentified swan	BETH	Bendire's thrasher	BWVI	Black-whiskered vireo
?TEA	Unidentified teal	BEVI	Bell's vireo (includes Least Bell's vireo records from IBP)	BWWA	Blue-winged warbler
?THU	Unidentified thrush	BEWR	Bewick's wren	CACH	Carolina chickadee
ABDU	American black duck	BGGN	Blue-gray gnatcatcher	CACW	Cactus wren
ABTO	Abert's towhee	BHCO	Brown-headed cowbird	CAEG	Cattle egret
ACFL	Acadian flycatcher	BHGR	Black-headed grosbeak	CAFI	Cassin's finch
ACWO	Acorn woodpecker	BHVI	Blue-headed Vireo	CAGN	California gnatcatcher
ALHU	Allen's hummingbird	BLBW	Blackburnian warbler	CAGO	Canada goose
AMAV	American avocet	BLGR	Blue grosbeak	CAGU	California gull
AMBI	American bittern	BLJA	Blue jay	CAHU	Calliope hummingbird
AMCO	American coot	BLPH	Black phoebe	CAKI	Cassin's kingbird
AMCR	American crow	BLPW	Blackpoll warbler	CALT	California towhee
AMGO	American goldfinch	BLRA	Black rail	CANT	Canyon towhee
AMKE	American kestrel	BLSW	Black swift	CANW	Canyon wren
AMPI	American pipit	BLTE	Black tern	CAQU	California quail
AMRE	American redstart	BLUE	Unidentified bluebird	CARW	Carolina wren
AMRO	American robin	BLUH	Blue-throated hummingbird	CASP	Cassin's sparrow
AMWI	American wigeon	BLVU	Black vulture	CATE	Caspian tern
ANHU	Anna's hummingbird	BNOW	Barn owl	CATH	California thrasher
APFA	Aplomado falcon	BNST	Black-necked stilt	CAVI	Cassin's vireo
ATFL	Ash-throated flycatcher	BOBO	Bobolink	CAWA	Canada warbler
ATSP	American tree sparrow	BOSP	Botteri's sparrow	CBCH	Chestnut-backed chickadee
AUOR	Audubon's oriole	BRBL	Brewer's blackbird	CBHA	Common black hawk
AWPE	American white pelican	BRCR	Brown creeper	CBTH	Curve-billed thrasher
BAEA	Bald eagle	BROC	Bronzed cowbird	CCLO	Chestnut-collared longspur
BANS	Bank swallow	BRPE	Brown pelican	CCSP	Clay-colored sparrow
BAOR	Baltimore oriole	BRSP	Brewer's sparrow	CEDW	Cedar waxwing
BARS	Barn swallow	BRTH	Brown thrasher	CERW	Cerulean warbler
BASP	Baird's sparrow	BRTI	Bridled titmouse	CFPF	Unidentified COFL or PSFL
BAWW	Black-and-white warbler	BRWA	Brewster's warbler	CHRA	Chihuahuan raven
BBCU	Black-billed cuckoo	BSKI	Black-shouldered kite	CHSP	Chipping sparrow
BBFL	Buff-breasted flycatcher	BTBW	Black-throated blue warbler	CHUK	Chukar
BBLH	Broad-billed hummingbird	BTGN	Black-tailed gnatcatcher	CITE	Cinnamon teal
BBMA	Black-billed magpie	BTGR	Boat-tailed grackle	CLGR	Clark's grebe

Species	Common Name	Species	Common Name	Species	Common Name
CLNU	Clark's nutcracker	FSSP	Five-striped sparrow	HOWR	House wren
CLRA	Clapper rail	GADW	Gadwall	HRSH	Harris's hawk
CLSW	Cliff swallow	GAQU	Gambel's quail	HUVI	Hutton's vireo
CMWA	Cape May warbler	GBAN	Groove-billed ani	INBU	Indigo bunting
COFL	Cordilleran Flycatcher	GBHE	Great blue heron	INDO	Inca dove
COGD	Common ground-dove	GBTE	Gull-billed tern	JAVE	Javelina
COGO	Common goldeneye	GCFL	Great-crested flycatcher	JUTI	Juniper titmouse
COGR	Common grackle	GCKI	Golden-crowned kinglet	KEWA	Kentucky warbler
COHA	Cooper's hawk	GCSP	Golden-crowned sparrow	KILL	Killdeer
COHU	Costa's hummingbird	GCTH	Gray-cheeked thrush	LAGO	Lawrence's goldfinch
COKI	Couch's kingbird	GCWA	Golden-cheeked warbler	LARB	Lark bunting
COLW	Colima warbler	GFWO	Golden-fronted woodpecker	LASP	Lark sparrow
COME	Common merganser	GHOW	Great horned owl	LAZB	Lazuli bunting
COMO	Common moorhen	GIFL	Gilded flicker	LBCU	Long-billed curlew
CONI	Common nighthawk	GIWO	Gila woodpecker	LBDO	Long-billed dowitcher
CONW	Connecticut warbler	GKIN	Green kingfisher	LBHE	Little blue heron
COPW	Common poorwill	GKIS	Great kiskadee	LBTH	Long-billed thrasher
CORA	Common raven	GOEA	Golden eagle	LBWO	Ladder-backed woodpecker
COTT	Cottontail	GRCA	Gray catbird	LEBI	Least bittern
COYE	Common yellow-throat	GREG	Great egret	LEFL	Least flycatcher
COYO	Coyote	GREJ	Green jay	LEGO	Lesser goldfinch
CRTH	Crissal thrasher	GRFL	Gray flycatcher	LEGR	Least grebe
CSWA	Chestnut-sided warbler	GRHA	Gray hawk	LENI	Lesser nighthawk
CWWI	Chuck-will's-widow	GRHE	Green heron	LEOW	Long-eared owl
DCCO	Double-crested cormorant	GRPE	Greater pewee	LESA	Least sandpiper
DCFL	Dusky-capped flycatcher	GRRO	Greater roadrunner	LESC	Lesser Scaup
DEER	Deer (White-tailed)	GRSP	Grasshopper sparrow	LETE	Least tern
DEJU	Dark-eyed junco	GRSQ	Ground Squirrel	LEWO	Lewis's woodpecker
DICK	Dickcissel	GRVI	Gray vireo	LEYE	Lesser yellowlegs
DIRA	Diamondback Rattlesnake	GRWA	Grace's warbler	LISP	Lincoln's sparrow
DOWO	Downy woodpecker	GRYE	Greater yellowlegs	LOSH	Loggerhead shrike
DUFL	Dusky flycatcher	GTGR	Great-tailed grackle	LOWA	Louisiana waterthrush
DUNL	Dunlin	GTTO	Green-tailed towhee	LUHU	Lucifer's hummingbird
EABL	Eastern bluebird	GWFG	Greater white-fronted goose	LUWA	Lucy's warbler
EAGR	Eared grebe	GWTE	Green-winged teal	MAGO	Marbled godwit
EAKI	Eastern kingbird	GWWA	Golden-winged warbler	MAHU	Magnificent hummingbird
EAME	Eastern meadowlark	HAFL	Hammond's flycatcher	MALL	Mallard
EAPH	Eastern phoebe	HASP	Harris's sparrow	MALLH	Mallard x Mexican hybrid
EASO	Eastern screech-owl	HAWO	Hairy woodpecker	MAND	Mandarin duck
EAWP	Eastern wood-pewee	HERG	Herring gull	MAWA	Magnolia warbler
ELOW	Elf owl	HETA	Hepatic tanager	MAWR	Marsh wren
ELTR	Elegant trogon	HETH	Hermit thrush	MCLO	McCown's Longspur
ETTI	Eastern tufted titmouse	HEWA	Hermit warbler	MECH	Mexican chickadee
EUST	European starling	HFDF	Unidentified empid (HAFL or DUFL)	MEDU	Mexican duck
EVGR	Evening grosbeal	HOFI	House finch	MEJA	Mexican jay
FEHA	Ferruginous hawk	HOLA	Horned lark	MERL	Merlin
FISP	Field sparrow	HOME	Hooded merganser	MGWA	MacGillivray's warbler
FOSP	Fox sparrow	HOOR	Hooded oriole	MIKI	Mississippi kite
FOTE	Forster's tern	HOSP	House sparrow	MISS	Missing data
FRGU	Franklin's gull	HOWA	Hooded warbler	MOBL	Mountain bluebird

Species	Common Name	Species	Common Name	Species	Common Name
MOCH	Mountain chickadee	PLVI	Plumbeous Vireo	SCJA	Scrub-jay
MODO	Mourning dove	PORC	Porcupine	SATH	Sage thrasher
MODU	Mottled duck	PRFA	Prairie falcon	SAVS	Savannah sparrow
MONA	Monarch Butterfly	PROW	Prothonotary warbler	SBDO	Short-billed dowitcher
MOQU	Montezuma quail	PRWA	Prairie warbler	SBFL	Sulpur-bellied flycatcher
MORA	Mohave Rattlesnake	PSFL	Pacific-slope Flycatcher	SCOR	Scott's oriole
MOUP	Mountain plover	PUFI	Purple finch	SCQU	Scaled quail
MOUQ	Mountain quail	PUGA	Purple gallinule	SCTA	Scarlet tanager
MOWA	Mourning warbler	PUMA	Purple martin	SEOW	Short-eared owl
MUDE	Mule Deer	PYNU	Pygmy nuthatch	SEPL	Semi-palmated plover
NAWA	Nashville warbler	PYRR	Pyrrhuloxia	SEWR	Sedge wren
NBTY	Northern beardless-tyrannulet	RABB	Rabbit	SNEG	Snowy egret
NECO	Neotropic cormorant	RAVE	Unidentifiedn raven	SNGO	Snow goose
NOBO	Northern bobwhite	RBGR	Rose-breasted grosbeak	SORA	Sora
NOCA	Northern cardinal	RBGU	Ring-billed gull	SOSA	Solitary sandpiper
NOFL	Northern flicker	RBNU	Red-breasted nuthatch	SOSP	Song sparrow
NOGO	Northern goshawk	RBSA	Red-breasted sapsucker	SPPI	Spague's pipit
NOHA	Northern harrier	RBWO	Red-bellied woodpecker	SPSA	Spotted sandpiper
NOMO	Northern mockingbird	RCKI	Ruby-crowned kinglet	SPTO	Spotted Towhee
NONE	No birds	RCSP	Rufous-crowned sparrow	SQUI	Squirrel
NOPA	Northern parula	RECR	Red crossbill	SSHA	Sharp-shinned hawk
NOPI	Northern pintail	REDH	Redhead	STFL	Scissor-tailed flycatcher
NOPO	Northern pygmy-owl	REVI	Red-eyed vireo	STJA	Steller's jay
NOWA	Northern waterthrush	RFWA	Red-faced warbler	STSA	Stilt Sandpiper
NRWS	Northern rough-winged swallow	RGDO	Ruddy ground-dove	STSP	Sharp-tailed sparrow
NSHO	Northern shoveler	RHWO	Red-headed woodpecker	STWO	Strickland's Woodpecker
NSHR	Northern shrike	RINP	Ring-necked pheasant	SUTA	Summer tanager
NSWO	Northern saw-whet owl	RITD	Ringed turtle-dove	SWHA	Swainson's hawk
NUWO	Nuttall's woodpecker	RLHA	Rough-legged hawk	SWSP	Swamp sparrow
OATI	Oak titmouse	RNDU	Ring-necked duck	SWTH	Swainson's thrush
OCWA	Orange-crowned warbler	RNPH	Red-necked phalarope	SWWA	Swainson's warbler
OLSP	Olive sparrow	RNSA	Red-naped sapsucker	TACH	Unidentified Tachycineta sp.
OLWA	Olive warbler	ROCK	Rock Squirrel	TBKI	Thick-billed kingbird
OROR	Orchard oriole	RODO	Rock dove	TEWA	Tennessee warbler
OSFL	Olive-sided flycatcher	ROGO	Ross's goose	THRA	Unidentified (CBTH or CRTH)
OSPR	Osprey	ROWR	Rock wren	THWH	Townsend's X hermit warbler hybrid
OVEN	Ovenbird	RSHA	Red-shouldered hawk	TOSO	Townsend's solitaire
PABU	Painted bunting	RSTO	Rufous-sided towhee	TOWA	Townsend's warbler
PARE	Painted redstart	RTBE	Rose-throated becard	TRBL	Tri-colored blackbird
PAUR	Pauraque	RTHA	Red-tailed hawk	TRES	Tree swallow
PAWA	Palm Warbler	RTHU	Ruby-throated hummingbird	TRHE	Tricolored heron
PBGR	Pied-billed grebe	RUBL	Rusty blackbird	TRKI	Tropical kingbird
PEFA	Peregrine falcon	RUDU	Ruddy duck	TTWO	Three-toed woodpecker
PFLO	Peach-faced Lovebird	RUHU	Rufous hummingbird	TUVU	Turkey vulture
PHAI	Phainopepla	RWBL	Red-winged blackbird	UIFI	Unidentified Carpodacus sp.
PHVI	Philadelphia vireo	RWSP	Rufous-winged sparrow	UNAI	Unidentified Aimophila
PIJA	Pinyon jay	SACR	Sandhill crane	UNAM	Unidentified Ammodramus sp.
PISI	Pine siskin	SAGS	Sage sparrow	UNAY	Unidentified Aythya
PIWA	Pine warbler	SAND	Sanderling	UNBL	Unidentified blackbird
PIWO	Pileated woodpecker	SAPH	Say's phoebe	UNCA	Unidentified Calcarius sp.

Species	Common Name	Species	Common Name	Species	Common Name
UNFLIK	Unidentified flicker sp.	VIWA	Virginia's warbler	YHBL	Yellow-headed blackbird
UNGD	Unidentified ground dove	VOLE	Vole	YRWA	Yellow-rumped warbler
UNGO	Unidentified goldfinch	WAVI	Warbling vireo	YTVI	Yellow-throated vireo
UNGR	Unidentified grebe	WBNU	White-breasted nuthatch	YTWA	Yellow-throated warbler
UNGU	Unidentified gull	WCSP	White-crowned sparrow	YWAR	Yellow warbler
UNHA	Unidentified hawk	WEBL	Western bluebird	ZTHA	Zone-tailed hawk
UNHE	Unidentified heron	WEGR	Western grebe		
UNHU	Unidentified hummingbird	WEKI	Western kingbird		
UNID	Unidentified bird	WEME	Western meadowlark		
UNJA	Unidentified jay	WESJ	Western scrub-jay		
UNME	Unidentified meadowlark	WESO	Western screech-owl		
UNMO	Unidentified Molothrus sp.	WETA	Western tanager		
UNMY	Unidentified Myiarchus sp.	WEVI	White-eyed vireo		
UNNU	Unidentified nuthatch	WEWA	Worm-eating warbler		
UNOR	Unidentified oriole	WEWP	Western wood-pewee		
UNPH	Unidentified phalarope	WFIB	White-faced Ibis		
UNPI	Unidentified Picoides sp.	WHCR	Whooping Crane		
UNRA	Unidentified rail	WHIB	White ibis		
UNSE	Unidentified Selasphorus sp.	WHIM	Whimbrel		
UNSH	Unidentified shorebird	WIFL	Willow flycatcher		
UNSP	Unidentified sparrow	WILL	Willet		
UNSW	Unidentified swallow	WIPH	Wilson's phalarope		
UNSZ	Unidentified Spizella sp. (?SPI=CHSP/BRSP/CCSP)	WISA	Williamson's sapsucker		
UNTA	Unidentified tanager	WISN	Wilson's snipe		
UNTO	Unidentified towhee sp.	WITU	Wild turkey		
UNTY	Unidentified Tyrannus sp.	WIWA	Wilson's warbler		
UNUM	Unidentified Numernius sp.	WIWR	Winter wren		
UNVI	Unidentified vireo	WODU	Wood duck		
UNWA	Unidentified warbler	WOTH	Wood thrush		
UNWO	Unidentified woodpecker	WPWA	Western palm warbler		
UNWR	Unidentified wren	WPWI	Whip-poor-will		
UPSA	Upland sandpiper	WREN	Wrentit		
VABU	Varied bunting	WTDO	White-tipped dove		
VASW	Vaux's swift	WTSP	White-throated sparrow		
VCHU	Violet-crowned hummingbird	WTSW	White-throated swift		
VEER	Veery	WWCR	White-winged crossbill		
VEFL	Vermilion flycatcher	WWDO	White-winged dove		
VERD	Verdin	XDOW	Unidentified dowitcher		
VESP	Vesper sparrow	XXEM	Unidentified empidonax		
VGSW	Violet-green swallow	XXGN	Unidentified gnatcatcher		
VIRA	Virginia rail	YBCH	Yellow-breasted chat		
UNCAR	Unidentified Carduelis or Carpodacus sp.	YBCU	Yellow-billed cuckoo		
UNCARD	Unidentified Cardinalis sp.	WESJ	Western scrub-jay		
UNCO	Unidentified cormorant	YBFL	Yellow-bellied flycatcher		
UNDE	Unidentified Dendroica sp.	YBSA	Yellow-bellied sapsucker		
UNDO	Unidentified Columbiana sp.	YCNH	Yellow-crowned night-heron		
UNFL	Unidentified flycatcher	YEJU	Yellow-eyed junco		

Appendix II - Breeding Behavior Codes

behavior_code	definition
A	Agitated behavior or anxiety calls from adult.
B	Nest building by some species of wrens* (Cactus, Bewick's, House, Marsh)and Verdin or excavations by woodpeckers.
C	Courtship behavior or copulation, includes displays and food exchange.
CF	Adult carrying food, except raptors, corvids, roadrunners, shrikes, and kingfishers.
CN	Carrying nesting materials (e.g. sticks, mud and cobwebs) except wrens* and Verdin.
DD	Distraction display, defense of unknown nest or young, or injury feigning.
FL	Recently fledged young of altricial species incapable of sustained flight or downy young of precocial species restricted to the natal area by dependence or limited mobility.
FS	Adult carrying fecal sack.
FY	Adult feeding recently fledged young.
N	Visiting probable nest site, but no further breeding evidence obtained.
NB	Nest building on the actual next-site, except the wrens* and Verdin.
NE	Nest with egg(s).
NY	Nest with young seen or heard.
ON	Occupied nest: adults entering or leaving a nest site in circumstances indicating an occupied nest, includes high tree, cliff or cavity/burrow nests that cannot be seen.
P	Pair observed in suitable habitat during breeding season.
S	Individuals singing.
T	Permanent territory assumed through defense of territory.
UN	Used nest or eggshells found - these must be carefully identified.