

Breeding Area	Status ¹	Nest ²	Incubation Date	Eggs	Hatch Date	Young	Fledged	Fledge Date
Sheep*	S	1	1/5-2/2	2+	2/8-3/18	2	1	5/29
One eaglet died 3/19-3/28.								
Suicide	S	1	<5/27	2+	<5/27	2+	2	<5/27
Sycamore*	S	2	1/8-19	2+	2/24	2	2	5/17, 5/24
Table Mountain	S	4	2/1-3/17	1+	3/17-4/15	1+	1	>6/14
Talkalai	F	4	1/5-2/2	1+	Failed 3/18-4/29.			
Tonto*	S	2	1/5-25	2+	2/20	2	2	5/7
Tower*	S	8	1/20-21	2+	2/25-2/26	2	2	5/21, 5/21-6/14
Winkelman	U							

¹ Breeding area status codes (Postupalsky 1974): U=unoccupied, O=occupied, S=successful, F=failed.

² Nest numbers are from Hunt et al. 1992; Driscoll et al. 1992, 1995a, 1995b, 1997, 1998, 1999; Driscoll and Beatty 1994.

* Nests monitored by the Arizona Bald Eagle Nestwatch Program.

Number of BAs	40 ¹	Number of Active BAs	29
Number of Occupied BAs	36	Number of Failed Breeding Attempts	10
Number of Eggs	48+	Number of Successful Breeding Attempts	21
Nest Success = 21/36	0.58	Number of Young Hatched	40+
Mean Brood Size = 31/21	1.48	Number of Young Fledged	31
		Productivity = 0.58 x 1.48	0.86

¹ We are unsure if the Suicide nest site is a new BA, or an alternate nest within the San Carlos or Coolidge BA. Adult identification in 2000 will clarify.

Table 3. Arizona bald eagle BA productivity summary, 2000.								
Breeding Area	Status ¹	Nest ²	Incubation Date	Eggs	Hatch Date	Young	Fledged	Fledge Date
Alamo	S	4	1/31 – 3/23	1+	1/31 – 3/23	1	1	5/15 – 6/9
			Nestling last observed at 8.5 weeks old on 5/15.					
Bartlett*	F	1	1/3 - 31	2		Failed 2/19		
Becker	O							
Blue Point	F	7	<1/17	1+		Failed 2/16		
Box Bar*	S	3	1/4 - 10	2+	2/14 - 18	2	2	5/4, 5/8
Camp Verde	U							
Canyon	O							
Cedar Basin	O							
Cibecue	O							
Cliff	O							
Coldwater	F	3	1/31 – 3/23	2+	3/23 – 4/17	2	Failed 5/15 - 6/9	
Coolidge	F	4	2/1 – 3/6	1+	3/8 – 4/3	1	Failed 4/3 – 5/10	
Devil's Post	U							
Doka*	S	1	< 1/3	2+	1/3 – 1/31	2	2	3/26, 4/8
Dupont	F	2	2/1 – 3/22	1+	3/22 - 4/20	1+	Failed 4/20 – 5/15	
East Verde	O							
Fort McDowell*	S	17	1/3 - 31	2+	2/11 - 12	2	2	4/29, 5/2
Granite Basin	O							
	S	4	1/17 – 2/1	2+	2/1 – 3/22	2	1	5/15 – 6/9
Horse Mesa			One nestling disappeared 4/20 – 5/15 at 5 to 8.5 weeks of age. Second nestling last observed on 5/15 at 8.5 weeks of age.					
Horseshoe*	S	11	1/3 – 31	2	3/3, 3/7	2	2	5/4 – 15, 5/15 – 6/9
			One nestling last observed on 5/7 at 9.5 to 10.5 weeks of age.					
Ive's Wash	O							
Ladders	O							
	F	2	2/1 – 3/22	2+	3/22 – 4/20	2	Failed 4/20 – 5/15	
Lone Pine			New 3 year old subadult in pair mid-season. Nestlings disappeared 4/20 – 5/15 at 4 – 8 weeks of age.					
Luna*	S	1	<2/27	3+	2/27 -3/30	3	1	6/3
			One nestling fell out of nest 5/15 – 5/19, one fell 5/20. Both eaten by coyotes on ground.					
Mule Hoof	U							
Orme*	F	6	<3/10	2+	3/28 -31	2	Failed 4/21	
Perkinsville	S	4	<3/23	1+	<3/27	1	1	5/15 – 6/9
	F	6	2/1 – 3/22	2+	3/22 - 30	2	Failed 5/15 – 6/9	
Pinal			Nestlings disappeared 5/15 – 6/9 at 6 – 9.5 weeks of age.					
Pinto	O							
Pleasant*	S	2	1/13 - 29	2+	2/28 – 3/2	2	2	5/23, 5/24
	S	5	1/17 – 2/1	1+	2/1 – 3/22	1	1	5/15 – 6/9
Redmond			Nestling last observed on 5/15 at 9 weeks of age.					
San Carlos	F	3	2/1 – 3/6	1+		Failed 3/22 – 4/3		
76	S	3	1/17 – 2/1	2+	2/1 – 3/22	2	2	5/15 – 6/9

¹ Breeding area status codes (Postupalsky 1974): U=unoccupied, O=occupied, S=successful, F=failed.

² Nest numbers are from Hunt et al. 1992; Driscoll et al. 1992, 1995a, 1995b, 1997, 1998, 1999; Driscoll and Beatty 1994.

* Nests monitored by the Arizona Bald Eagle Nestwatch Program.

Table 3 (continued).

Breeding Area	Status ¹	Nest ²	Incubation Date	Eggs	Hatch Date	Young	Fledged	Fledge Date
Sheep*	F	1	1/17 - 2/1	1+	3/13 - 16	1+	Failed 5/5	
Nestling taken to rehab on 5/5 for severe dehydration. Died 5/8.								
Suicide	S	1	1/17 - 2/1	3+	3/10 - 22	3	3	>5/15
Sycamore*	F	3	1/3 - 31	1+	Failed 3/10			
Table Mountain	F	4	1/31 - 3/23	1+	Failed 3/23 - 4/17			
Talkalai	F	7	<3/22	1+	Failed 3/22 - 4/3			
Tonto*	F	2	1/17 - 2/1	2	Failed 4/3			
Tower*	S	9	<2/4	2+	3/12 - 17	2	2	5/17
One young taken to rehab after falling from nest on 5/17. Released back into BA on 6/14.								
Winkelman	U							

¹ Breeding area status codes (Postupalsky 1974): U=unoccupied, O=occupied, S=successful, F=failed.

² Nest numbers are from Hunt et al. 1992; Driscoll et al. 1992, 1995a, 1995b, 1997, 1998, 1999; Driscoll and Beatty 1994.

* Nests monitored by the Arizona Bald Eagle Nestwatch Program.

Table 4. Arizona bald eagle productivity summary, 2000.

Number of BAs	41	Number of Active BAs	27
Number of Occupied BAs	37	Number of Failed Breeding Attempts	14
Number of Eggs	45+	Number of Successful Breeding Attempts	13
Nest Success = 13/37	0.35	Number of Young Hatched	36+
Mean Brood Size = 22/13	1.69	Number of Young Fledged	22
		Productivity = 0.35 x 1.69	0.59

APPENDIX B: BARTLETT BREEDING AREA SUMMARY

Table 5. Observed human activity and bald eagle behavior, Bartlett BA, Arizona, 1999.

Type	N ¹	W	R	F	L	X	U	D-D ² Total	Total
Small Plane	267	45	5	5	--	3	8	239 (77.9%)	333 (75.1%)
Helicopter	12	26	1	--	1	1	1	24 (7.8%)	42 (9.5%)
Canoe/Kayak	5	8	2	1	1	--	--	13 (4.2%)	17 (3.8%)
Driver	7	2	--	1	--	1	1	8 (2.6%)	12 (2.7%)
Gunshots	5	2	1	1	--	--	--	8 (2.6%)	9 (2.0%)
OHV	4	1	1	--	--	--	1	6 (2.0%)	7 (1.6%)
Hiker	5	2	--	--	--	--	--	4 (1.3%)	7 (1.6%)
Fisherman	4	1	--	--	--	--	--	1 (0.3%)	5 (1.1%)
Birder	1	--	--	--	--	1	--	2 (0.7%)	2 (0.4%)
Camper	1	--	--	--	--	--	--	0	1 (0.23%)
Researcher	--	--	--	1	--	--	--	0	1 (0.23%)
Agency Worker	1	--	--	--	--	--	--	0	1 (0.23%)
Hunter	1	--	--	--	--	--	--	1 (0.3%)	1 (0.23%)
Shooter	1	--	--	--	--	--	--	0	1 (0.23%)
Dog Walker	1	--	--	--	--	--	--	0	1 (0.23%)
Dog Barking	1	--	--	--	--	--	--	0	1 (0.23%)
Boat w/ Generator	--	--	--	1	--	--	--	0	1 (0.23%)
Rafter	--	--	--	--	1	--	--	1 (0.3%)	1 (0.23%)
Total	316	87	10	10	3	6	11	307	443

¹ Bald eagle behavior, N=none, W=watched, R=restless, F=flushed, L=left area, X=bird flies from perch to attend nest, U=unknown.

² D-D Total=Observations on dawn-to-dusk days.

Table 6. Observed forage event and success, Bartlett BA, Arizona, 1999.

Sex	Fish		Mammals		Unknown		Total	
	E ¹	S ² -U	E	S-U	E	S-U	E	S-U
Male	10	8-2	1	1-0	2	2-0	13	11-2
Female	11	11-0	--	--	--	--	11	11-0
Total	21	19-2	1	1-0	2	2-0	24	24-2

¹ E=A Single forage event, not the number of attempts during one attempt.

² S-U=Successful – Unsuccessful forage events.

Table 7. Observed prey types delivered to the nest, Bartlett BA, Arizona, 1999.

Sex	Fish	Birds	Mammals	Herps	Unknown	Carrion	Total
Male	50	2	4	2	9	2	69 (82.1%)
Female	9	--	--	--	3	--	12 (14.2%)
Unknown	--	2	--	--	1	--	3 (3.5%)
Total	59 (70.2%)	4 (4.8%)	4 (4.8%)	2 (2.4%)	13 (15.5%)	2 (2.4%)	84

Table 8. Observed prey items delivered to the nest, Bartlett BA, Arizona, 1999.

Sex	Fish					Birds	Mammals		Total
	S ¹	CC	LMB	BL	BC	AC	R	SQ	
Male	22	5	4	2	1	2	1	1	38 (84.4%)
Female	4	--	--	--	--	--	1	--	5 (11.1%)
Unknown	--	--	--	--	--	2	--	--	2 (4.4%)
Total	26	5	4	2	1	4	2	1	45

¹ S=sucker spp., CC=channel catfish, LMB=largemouth bass, BL=bluegill, BC=black crappie, AC=American coot, R=western cottontail, SQ=rock squirrel.

Table 9. Observed human activity and bald eagle behavior, Bartlett BA, Arizona, 2000.

Type	N ¹	W	U	D-D ² Total	Total
Small Plane	4	--	2	3 (27.3%)	6 (40.0%)
OHV	3	--	--	3 (27.3%)	3 (20.0%)
Hunter	2	--	1	3 (27.3%)	3 (20.0%)
Fisherman	--	1	--	0	1 (6.6%)
4x4	--	1	--	1 (9.1%)	1 (6.6%)
Canoe/Kayak	1	--	--	1 (9.1%)	1 (6.6%)
Total	10	2	3	11	15

¹ Bald eagle behavior, N=none, W=watched, U=unknown.

² D-D Total=Observations on dawn-to-dusk days.

APPENDIX C: BOX BAR BREEDING AREA SUMMARIES

Table 10. Observed human activity and bald eagle behavior, Box Bar BA, Arizona, 1999.

Type	N ¹	W	R	F	L	B	U	Total
Small Plane	36	7	1	--	--	--	8	53 (34.9%)
Helicopter	18	7	1	--	--	--	5	31 (20.4%)
OHV	11	4	1	--	--	--	--	16 (10.5%)
Driver	11	4	--	--	--	--	--	15 (9.9%)
Horseback Rider	10	1	--	1	--	1	1	14 (9.2%)
Fisherman	7	--	--	--	--	--	--	7 (4.6%)
Canoe/Kayak	5	1	--	--	--	--	--	6 (3.9%)
Hiker	4	--	--	--	--	--	--	4 (2.6%)
Gunshots	--	--	3	--	--	--	1	4 (2.6%)
Tuber	1	--	--	--	--	--	1	2 (1.3%)
Agency Worker	--	--	--	--	1	--	--	1 (0.6%)
Total	103	24	6	1	1	1	16	152

¹ Bald eagle behavior, N=none, W=watched, R=restless, F=flushed, L=left area, B=bird not in area, U=unknown.

Table 11. Weekend use of USFS road 160, Box Bar BA, Arizona, 1999.

Clearance	Vehicles	Occupants
High (Capable of crossing River)	57 (27.0%)	136 (26.8%)
Moderate	93 (44.1%)	238 (46.9%)
Low (Incapable of crossing River)	56 (26.5%)	128 (25.2%)
Unknown	5 (23.7%)	5 (1.0%)
Total	211	507

Table 12. Observed forage event and success, Box Bar BA, Arizona, 1999.

Sex	Fish		Unknown		Total	
	E ¹	S ² -U	E	S-U	E	S-U
Male	3	3-0	--	--	3	3-0
Female	2	2-0	2	1-1	4	3-1
Total	5	5-0	2	1-1	7	6-1

¹ E=A Single forage event, not the number of attempts during one attempt.

² S-U=Successful – Unsuccessful forage events.

Table 13. Observed human activity and bald eagle behavior, Box Bar BA, Arizona, 2000.

Type	N ¹	W	R	F	L	U	Total
Small Plane	149	24	--	--	--	93	266 (54.3%)
Helicopter	28	15	1	1	1	15	61 (12.5%)
Hiker	23	3	--	1	--	16	43 (8.8%)
Horseback Rider	19	6	--	1	--	5	31 (6.3%)
OHV	13	2	--	--	1	7	23 (4.7%)
Fisherman	10	4	--	--	--	7	21 (4.3%)
Driver	7	1	--	3	--	9	20 (4.1%)
Canoe	2	2	--	--	--	2	6 (1.2%)
Gunshots	2	2	2	--	--	--	6 (1.2%)
Agency Worker	--	--	1	3	--	--	4 (0.8%)
Swimmer	2	--	--	--	--	--	2 (0.4%)
Researcher	--	--	1	--	--	--	1 (0.2%)
Shooter	--	--	--	1	--	--	1 (0.2%)
Birder	--	--	--	1	--	--	1 (0.2%)
Cycler	1	--	--	--	--	--	1 (0.2%)
Tuber	--	--	--	--	--	1	1 (0.2%)
Picnicker	1	--	--	--	--	--	1 (0.2%)
Total	257	59	5	11	2	155	489

¹ Bald eagle behavior, N=none, W=watched, R=restless, F=flushed, L=left area, U=unknown.

Table 14. Method of entry into closure, Box Bar BA, Arizona, 2000.

Date	Foot	Motorized/Horseback	Total
February	8 (10.8%)	21 (28.0%)	29 (19.4%)
March	11 (14.9%)	26 (34.6%)	37 (24.8%)
April	50 (67.6%)	25 (33.3%)	75 (50.3%)
May	5 (6.8%)	3 (4.0%)	8 (5.4%)
Total	74 (49.7%)	75 (50.3%)	149

Table 15. Observed prey types delivered to the nest, Box Bar BA, Arizona, 2000.

Sex	Fish	Birds	Unknown	Carrion	Total
Male	4	--	3	--	7 (6.9%)
Female	79	3	11	1	94 (93.1%)
Total	83 (82.2%)	3 (3.0%)	14 (13.9%)	1 (0.9%)	101

APPENDIX D: FORT McDOWELL BREEDING AREA SUMMARIES

Table 16. Observed human activity and bald eagle behavior. Fort McDowell BA, Arizona, 1999.

Type	N ¹	W	R	F	L	X	B	U	D-D ² Total	Total
Small Plane	86	47	1	--	4	1	1	52	150 (69.1%)	192 (64.4%)
Helicopter	12	27	1	1	1	1	--	11	29 (13.4%)	54 (18.1%)
Driver	7	4	--	1	--	--	--	5	14 (6.5%)	17 (5.7%)
Canoe/Kayak	--	8	--	--	1	--	1	--	7 (3.2%)	10 (3.4%)
Picnicker	1	4	--	--	--	--	--	--	4 (1.8%)	5 (1.7%)
Gunshots	3	--	--	--	--	1	--	1	5 (2.3%)	5 (1.7%)
Fisherman	--	3	--	--	--	--	--	--	3 (1.4%)	3 (1.0%)
Jets	--	2	--	--	--	--	--	1	1 (0.4%)	3 (1.0%)
Camper	--	3	--	--	--	--	--	--	3 (1.4%)	3 (1.0%)
Agency Worker	--	--	--	--	--	2	--	--	1 (0.4%)	2 (0.7%)
Horseback Riders	1	--	--	--	--	--	--	--	0	1 (0.3%)
Researcher	--	--	--	--	--	1	--	--	0	1 (0.3%)
Shooter	--	1	--	--	--	--	--	--	0	1 (0.3%)
OHV	--	--	--	--	--	1	--	--	1 (0.4%)	1 (0.3%)
Total	110	99	2	2	6	7	1	70	217	298

¹ Bald eagle behavior, N=none, W=watched, R=restless, F=flushed, L=left area, X=other (no explanation offered), B=bird not in area, U=unknown.

² D-D Total=Observations on dawn-to-dusk days.

Table 17. Observed forage event and success. Fort McDowell BA, Arizona, 1999.

Sex	Fish		Mammals		Total	
	E ¹	S ² -U	E	S-U	E	S-U
Male	23	11-12	--	--	23	11-12
Female	12	12-0	1	1-0	13	13-0
Total	35	23-12	1	1-0	36	24-12

¹ E=A Single forage event, not the number of attempts during one attempt.

² S-U=Successful – Unsuccessful forage events.

Table 18. Observed prey types delivered to the nest, Fort McDowell BA, Arizona, 1999.

Sex	Fish	Birds	Mammals	Carrion	Total
Male	23	1	1	9	34 (41.5%)
Female	41	--	1	6	48 (58.5%)
Total	64 (78.0%)	1 (1.2%)	2 (2.4%)	15 (18.3%)	82

Table 19. Observed prey items delivered to the nest, Fort McDowell BA, 1999.

Sex	Fish			Mammals	Total
	S ¹	CC	Carp	R	
Male	5	5	4	1	15 (35.7%)
Female	14	9	4	--	27 (64.3%)
Total	19	14	8	1	42

¹ S=sucker spp., CC=channel catfish, C=carp, R=western cottontail.

Table 20. Observed human activity and bald eagle behavior, Fort McDowell BA, Arizona, 2000.

Type	N ¹	W	R	F	L	Total
Aircraft	68	3	--	--	--	71 (78.0%)
Kayakers	4	--	--	--	--	4 (4.4%)
Gunshots	3	--	--	--	--	3 (3.3%)
Hikers	--	2	2	2	2	8 (8.8%)
Chainsaws	3	--	--	--	--	3 (3.3%)
Horseback Riders	1	1	--	--	--	2 (2.2%)
Total	79	6	2	2	2	91

¹ Bald eagle behavior, N=none, W=watched, R=restless, F=flushed, L=left area.

Table 21. Observed prey types delivered to the nest, Fort McDowell BA, Arizona, 2000.

Sex	Fish	Birds	Mammals	Unknown	Total
Male	13	1	1	17	32 (76.2%)
Female	5	--	--	5	10 (23.8%)
Total	18 (42.9%)	1 (2.4%)	1 (2.4%)	22 (52.4%)	42

APPENDIX E: HORSESHOE BREEDING AREA SUMMARY

Table 22. Observed human activity and bald eagle behavior, Horseshoe BA, Arizona, 2000.

Type	N ¹	W	R	F	L	Total
Cars/Trucks	453	--	--	--	--	453 (78.5%)
OHV	82	--	--	--	--	82 (14.2%)
Small Plane	24	1	--	--	--	25 (4.3%)
Jets	7	--	3	--	--	10 (1.7%)
Hiker	--	1	--	1	--	2 (0.3%)
Agency Worker	1	--	--	1	--	2 (0.3%)
Helicopter	--	--	--	--	1	1 (0.2%)
Hunter/ Gunshot	--	1	--	--	--	1 (0.2%)
Kayakers	--	1	--	--	--	1 (0.2%)
Total	567	4	3	2	1	577

¹ Bald eagle behavior, N=none, W=watched, R=restless, F=flushed, L=left area.

Table 23. Observed prey types delivered to the nest, Horseshoe BA, Arizona, 2000.

Sex	Fish	Birds	Unknown	Total
Male	33	1	11	45 (71.4%)
Female	8	--	6	14 (22.2%)
Unknown	2	--	2	4 (6.4%)
Total	43 (68.3%)	1 (1.6%)	19 (30.2%)	63