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BALD EAGLE MANAGEMENT PROJECT
UPDATE: THE NESTWATCH NEWS
March 1997



WELCOME BACK ONE MORE TIME!
It's been awhile since the last *Nestwatch News*, but that doesn't mean the eagles haven't done anything. On the contrary, Arizona bald eagles continue to surprise us and present interesting management challenges. The chapters are still unfolding....

ABOUT THE PROJECT
Arizona's Bald Eagle Project is a function of the Arizona Game and Fish Department's (AGFD) Nongame and Endangered Wildlife Program. It is carried out through the Southwestern Bald Eagle Management Committee, a voluntary interagency oversight group that was established in the mid 1980s to promote better coordination and more efficient use of resources in meeting the needs of the crown jewels of Arizona's wildlife, our bald eagles. Management Committee members include a variety of federal and state agencies, Native American Tribes, and private groups. Private landowners and conservation organizations also help us carry out on-the-ground actions.

The project is staffed, and this update is written, by three biologists: Bald Eagle Management Coordinator Greg Beatty and his assistant, Nongame Biologist James (Jamey) Driscoll, who work year-round; and Nongame Biologist John Koloszar, who joins the effort during the December-June breeding season. Other Nongame and Endangered Wildlife Program staff in Phoenix and AGFD Regional staff also provide essential support to the project, but Greg, Jamey, and John are the principals involved in bald eagle management on a daily basis. During the bald eagle nesting season, their efforts are supplemented by a crew of nestwatchers who are hired by contract to monitor key breeding territories throughout Arizona.

NESTWATCH SEASON ONCE AGAIN
We have a nestwatch crew of 23 people this year, and they have been in the field since February 7. Orientation went smoothly and the annual Burnt Weenie Roast, at which nestwatchers first meet each other, was one of the best in recent memory. Thanks to the U.S. Fish and Wildlife Service for hosting our indoor orientation, and to Bob Shields and Lauren Turner of the Tonto National Forest and Brian Anthony of AGFD for assisting in a little bit of common-sense enforcement guidance.

The crew is a good one and includes 10 folks who have been nestwatchers in the past. Nestwatchers are stationed along the Verde River from Clarkdale down to Fort McDowell, Lake Pleasant, Winkelman, and along Tonto Creek. Most everyone has been enjoying our wonderful winter (errrr...), spring (errrr...), summer weather. Except for possibly Kris Covert, Jennifer Ottinger, Jason Beason, and Kerry Noonan, who had to endure a little bit of the wintery white stuff in late February.

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The sites being monitored, and the nestwatchers at each site, are: **Bartlett** - Scott Schlossberg and Bill Sobers; **Fort McDowell** - Wyatt Nimitz, Rob Fletcher, Mike Neal, and Kevin Long; **Horseshoe** - Pete Epanchin and Mele Wheaton; **Ladders** - Kerry Noonan and Jason Beason; **Luna** - Chris Buelow and Jenna Garvey; **Pleasant** - Patty Scifres and Kimberly Berger; **76** - Beth Cable and Troy Rintz; **Tonto** - Liz Carver and Gary Cress; and **Tower** - Jen Dhundale, Jennifer Ottinger, and Kris Covert.

NEW TERRITORIES - DUPONT CANYON, SYCAMORE CREEK, AND BECKER LAKE

The 36th, 37th, and 38th bald eagle breeding areas were confirmed this season: Dupont Canyon in the Sierra Anchas north of Roosevelt Lake, Sycamore Creek at Fort McDowell, and Becker Lake near Springerville. This makes 11 breeding areas discovered since 1992. Six of the sites we discovered in their first year of existence (Becker, Luna, San Carlos, Sycamore Creek, Tonto, and Winkelman), 2 had most likely been in existence for a short while prior to discovery (Talkalai, Dupont), and 3 are reoccupied historical sites (Box Bar, Camp Verde, Tower). Also, the Ash Breeding Area was relegated to historical status after not being occupied for 10 consecutive years.

Dupont Canyon was reported to us by bear hunters scouting in the Sierra Anchas. We somewhat scoffed at the idea of eagles breeding 14 miles away from the closest body of water, until they showed us a picture. We were still a bit wary, because although there certainly was an eagle in the picture and a large nest, the eagle wasn't at the nest. And c'mon, 14 MILES from the nearest body of water? Even for a bald eagle that's a long way to go for food. Well, to Jamey's surprise, he found an adult eagle perched at the nest, catfish bones underneath the nest, and monofilament fishing line in the nest! These eagles were bringing back food to the nest in 1996 and the closest place to get catfish is Roosevelt Lake! The Dupont eagles were found incubating in ponderosa pine tree nest #2 on February 4, 1997.

The Sycamore Creek territory and last year's discovery of the Box Bar eagles are redefining our concept of how large an eagle territory must be within Arizona. From 1971 to 1994, only three pairs of bald eagles had territories along the lower Verde River between Bartlett Lake and the Salt/Verde river confluence. The 10 river kilometers of Bartlett Lake, 40 river kilometers of the lower Verde River, and 10 river kilometers on the lower Salt River translated into about 20 river kilometers per breeding pair of eagles. The three pairs of eagles along the lower Verde and the Salt/Verde confluence had their nests placed no closer than about 15 river kilometers from each other. Now with the new Box Bar and Sycamore Creek pairs, five pairs of eagles are breeding in the same space. All these eagles have their nests within a 36 kilometer stretch of river. There are only 11, 4, 11, and 10 river kilometers of space between these nests! Yikes, can they all get enough food and be successful?

The Becker Lake nest was discovered by AGFD Region I Fisheries Biologists conducting creel censuses in January 1997. The eagles have been observed building their nest and perching in the nest. This is the second new breeding area in the White Mountains (Luna was discovered in

1994). The AGFD Regional Office in Pinetop and Nongame Branch are developing a closure for the breeding site. More than likely, these eagles will follow the same foraging strategy as the Luna Lake eagles: waterfowl in the early spring and stocked rainbow trout throughout the rest of the season.

EARLY FAILURES AT SAN CARLOS AND WINKELMAN

A couple of sad but interesting breeding failures occurred early in 1997 at the San Carlos and Winkelman breeding areas. In late 1994, the San Carlos eagles built their nest in a small crotch of a cottonwood tree (5 inches in diameter). As eagles are prone to do, they kept on building upon their initial nest structure in 1995, 1996, and 1997. This year, the nest became too large for the supporting branch, which broke. Unfortunately, the nest fell while the eagles were incubating an egg. This happened early in the incubation period, so we are hopeful the birds will build a new nest and lay a second clutch of eggs. At Winkelman, nestwatchers Laurie Cleary and Mike Edwards watched the eagles lay an egg on the second day of observation. In the middle of the night, they heard the eagles vocalize. They woke up the next morning to find an empty nest. After seeing the eagles infrequently for a week, they finally saw the eagles copulate and begin to build furiously upon nest #1. We climbed the nest while the birds were out of the area and found a broken egg. Possibly eggshell thinning (we have the shells to measure) or an accident (maybe the eagles crushed the egg when surprised by a ringtail cat) caused the egg to break. We are also hopeful that the Winkelman birds will lay a second clutch.

BOX BAR FEMALE AND MONOFILAMENT FISHING LINE

Nestwatchers Chris Buelow and Jenna Garvey saw a piece of monofilament fishing line dangle from the Box Bar female's mouth after she ate a dead fish. They then witnessed her scratch at and shake her head violently to try and remove the fishing line. After receiving an emergency call from the nestwatchers, we traveled to the site and found the eagle acting normal. No fishing line hung from her mouth as she spent the end of the day preening her feathers.

Three days later, when we thought all was fine, we saw her regurgitate the monofilament, shake her head, and eventually re-swallow the monofilament. Clearly, this bird was in trouble. Was a hook stuck in her crop, not allowing the monofilament to be swallowed or regurgitated? We didn't know, but what we do know is that a breeding female is more important to the population than the eggs she was incubating. And since she was breeding with an immature plumaged male, the eggs were likely infertile. We needed to be aggressive and not leave her life to chance, so we decided to trap her and take her to a veterinarian.

We initially used bait along the river to try to capture the female, but caught the male instead. We read his color band and discovered that he was three-years old and hatched from the Pleasant territory in 1994. Interestingly enough, he is breeding with his aunt.

We then watched the female eat a few bits of food the male brought her and drink water. So, we were encouraged about her status but still not convinced she was 100 percent healthy. We

still believed it was best to capture her. We came out a second day to try and use a noosed carpet in the nest but could not use the trap since she remained off the nest the entire day.

On the third day of trapping, we decided to try bait in the morning and, if not successful, to use the noosed carpet in the early afternoon. That morning she again showed no interest in the bait. So, Jamey climbed into the nest, removed the eggs, placed fake eggs in the nest, and secured the noosed carpet to the nest. The eagle eggs were immediately taken to The Phoenix Zoo by John. After examining the eggs through a light box, one of the two eggs was found to be viable! The female then returned to the nest and began to incubate the fake eggs.

The female didn't seem to be caught as we watched her incubate for about an hour. We began to worry that the male might come in for a nest exchange. What then? If we caught him while she watched, she'd probably never return to the nest. So, we decided to walk toward the nest, and make her alert enough to walk in the nest and get caught. If she flushed and wasn't captured, we'd have a chance to catch her when she returned to the nest. However, not unlike Indiana Jones, somehow she avoided placing her toes or foot in one of the 50 nooses and flew out of the nest. Now for the unexpected; she wouldn't return to the nest. She kept circling the nest tree and aborted nearly 20 landings in the nest. Finally, as dusk ensued, Jamey climbed back up the tree and removed the noosed carpet.

A couple days later, we again tried to capture her with bait in the nest area, but to no avail. Hopefully she will be alright; it has now been more than a week since we last saw monofilament hanging from her mouth. Maybe she has gotten rid of it or has swallowed it. So far, there are no signs that she is ill. As each day passes, we feel more confident about her health. The egg, well, we can't return it to the nest. So, The Phoenix Zoo will try to hatch it and then we will foster it into another nest with an eaglet of similar age. Sometimes the best laid plans....

CURRENT PRODUCTIVITY

The information for the mid-March productivity update (see next page) was collected through Occupancy and Reproduction Assessment helicopter flights provided by the Bureau of Reclamation on February 3 and 4, 1997 and Salt River Project on March 14, ground visits by AGFD and U.S. Forest Service, and from nestwatchers on site.

QUESTIONS?

The Nestwatch News will be issued about every six weeks through June, and then periodically throughout the year. If you have any questions, please call us at (602) 789-3512.

1997 Arizona Bald Eagle Productivity - March 17, 1997								
Breeding Area	B.A. Status ¹	Nest #	Incu Date	# Eggs	Hatch Date	# Young	# Fledged	Fledge Date
Alamo	F	4	1/12-2/3	1+	Empty nest found 3/14 - 2/21 to 3/14			
Bartlett	A	2	1/19-2/5	1+	3/1	1+		
Blue Point	A	7	1/9-2/4	3+	<3/14	3		
Becker	A?	1	<2/14?	1+?				
Box Bar	A	2	2/3-26	2	Eggs removed - one egg fertile and at Phoenix Zoo 3/9			
Camp Verde	U							
Canyon	U							
Cedar Basin	U							
Chino	U							
Cibecue	U							
Cliff	O							
Coolidge	A	2	1/23-2/4	1+				
Devil's Post	U							
Dupont Canyon	F?	2	1/7-2/4	1+	Incubating on 3/14 - minimum of 3 days past hatch date			
East Verde	F	6	<1/7	1+	Empty nest found 3/14 - failed 2/3 to 3/14			
Ft. McDowell	A	16	1/7-2/3	2+	2/26	2		
Horse Mesa	A	4	1/9-2/4	1+	<3/14	1+		
Horseshoe	A	11	1/30-2/3	2	3/10-11	1+		
Ive's Wash	A	3	2/3-21	1				
Ladders	A	3	2/17	1+				
Lone Pine	U							
Luna	A	1	<2/5	1+	<3/17	1+		
Mule Hoof	U							
Orme	A	1	1/9-2/3	1+	2/25-3/14	1+		
Perkinsville	O	2 adults and new nest #3 found on 3/14						
Pinal	A	3	<3/14	1+				
Pinto	F	3	1/9-29	1+	Empty nest found 3/14 - failed 1/29 to 3/14			
Pleasant	A	2	1/7-30	2+	2/26-28	2		
Redmond	A	5	1/9-2/4	2	<3/14	1+		
San Carlos	F	1	<1/9	1	Branch broke and nest fell 1/9-21. Egg broke			
Sycamore Creek	F	1	<2/3	1	Incubating minimum of 7 days past hatch date			
76	A	3	1/28-2/7	1+				
Sheep	O							
Table Mountain	A	4	1/7-2/3	1+	2/19-3/14	1+		
Talkalai	O							
Tonto	A	2	1/9-2/4	2+	2/23	2		
Tower	A	8	1/7-29	1+	3/3-6	1		
Winkelman	F	1	2/9	1	Egg broke in nest during first night of incubation			

¹Breeding area status codes: U=unoccupied, O=occupied, A=active (eggs or young present), S=successful, F=failed

Copies of various Nongame and Endangered Wildlife Program Technical Reports and other information pertaining to the Bald Eagle Management Project are available from the Nongame Branch, Arizona Game and Fish Department, 2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602 789-3500).

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