Final Report

A survey for Yellow-billed Cuckoo in recorded historic and other likely locations in Idaho



Photo by Steve Metz (<u>www.stevemetzphotography.com</u>)
Used with permission

Timothy D. Reynolds and Chad I. Hinckley

August 2005

TREC, Inc. 4276 E 300 North Rigby, Idaho 83442 208.745.6913 trec@onewest.net



Idaho Bureau of Land Management Technical Bulletin 2005-05

INTRODUCTION

The Yellow-billed Cuckoo (*Coccyzus americanus*; YBCU) is a Candidate species for Federal listing as threatened or endangered in several western states, including Idaho. In 2001 the US Fish and Wildlife Service determined that listing this species was warranted, but precluded, by higher priority listing actions (USFWS 2001). The USFWS concluded "the overall magnitude of threats to the Western YBCU DPS (distinct population segment) was high, but the immediacy of the threats was not imminent." The deterioration of habitat is considered the number one cause for their declining numbers. Nesting pairs require a minimum of approximately five acres of prime riparian habitat, which, in Idaho and much of the west, consists of old growth cottonwoods, with a dense understory of willow or dogwood.

This species is notoriously difficult to observe in the wild. It generally prefers very heavy cover, and is mostly inconspicuous in its habits. Not a true songbird, it is neither particularly vocal, nor is its call particularly far reaching. Because of these traits, this species is relatively unknown in Idaho. Moreover, Idaho is at or near the range limit of this species, thus it is unlikely YBCU in Idaho have ever been numerous. In Idaho, YBCU was considered a rare breeder by Larrison et. al. (1967); more recently Groves (1997) classified it as critically imperiled. Taylor (2000) called it "...one of the most endangered bird species in Idaho," and concluded "It could easily become extirpated from the state in the near future." Between 1895 and 2002 there were 42 verifiable records of this species in Idaho (D. Stephens, *in litt.*). Although YBCU has been recorded in ten of the 28 lati-long blocks in the state (Stephens and Sturts, 1991), more than 30% of the historic records have been in the Upper Snake River Basin.

Because there are only a small number of records of YBCU in the state, land and wildlife management agencies do not have solid evidence to either support or argue against listing this species. Similarly, the agencies are uncertain where, or when, management actions for this species would be best implemented.

It is unknown if the lack of records of this species in Idaho indeed signifies an extremely small number and sporadic occurrence of Yellow-billed Cuckoo in Idaho, or if this merely reflects a lack of coordinated effort to detect this secretive species in the state.

OBJECTIVES

There were four primary objectives to this project:

- Conduct a thorough search for additional historic records of this species in Idaho.
- Conduct nest searches in occupied habitat.
- Develop and implement a sampling methodology for YBCU in areas of historic occurrence and in other suitable habitat.
- Based on field sampling success, establish a long-term monitoring protocol with which to monitor this species in areas of known or likely occupation.



MATERIALS AND METHODS

Historic Records. We conducted a search of technical literature, including searches of various "gray-literature" and electronic databases (e.g. Dissertation Abstracts, BBS surveys, etc.) for information on Yellow-billed Cuckoos in Idaho. We also requested information from field notes and personal records from Idaho birders through the IBLE (Idaho Birders Linked Electronically) newsgroup (http://groups.yahoo.com/group/ible/). Last, we asked the curators of the vertebrate collections at regional universities and national museums for any records of YBCU from Idaho.

Sampling methodology. Standard, routinized surveys for YBCU recently have been conducted in Arizona, California, and Utah (Magill and Halterman 1999, Halterman et al. 2002, Kozwalski Pers. Comm.). We contacted Magill, Halterman, and Kozwalski, discussed their methodology and lessons learned, and developed a survey protocol and field data sheet consistent with their recommendations. To implement the protocol, we enlisted the help of recognized local birders, tribal biologists, and agency personnel to augment the field effort of TREC, Inc., staff and technicians. Based on our historic record search, we focused our field efforts in and near historic locations throughout Idaho.

Because the majority of historic records were from the Upper Snake River Basin, we examined aerial photographs of the Upper Snake River corridor and eliminated unlikely habitat from our surveys. Subsequently, we surveyed suitable habitat along the entire Snake River corridor from the backwaters of American Falls Reservoir upstream to Palisades Dam, and along the Henry's Fork of the Snake from the confluence with the South Fork of the Snake upstream to St. Anthony. Access to starting points for pedestrian surveys was by automobile, jet boat and drift boat.

RESULTS

Historic Records. Prior to this study, there were about 40 known records of YBCU in the state from 1895 – 1996 (Stephens *in litt*, Sturts *in litt*; Table 1a, 1b). As of spring, 2003, the Idaho Department of Fish and Game Conservation Data Center had only 10 records for this species in their data base (CDC *in litt*.); only one of which occurred later than, and hence was not included in Stephens' list.

Our search added over 30 new records through 2002. Many of these records were recent (subsequent to Stephens' and Sturts' lists) and came from birders who had YBCU sightings in their field notes but had not reported their observations (Table 1a, 1b). Other records were from gray literature, published accounts, and birder's journals. Although we include GPS coordinates for historic records, we emphasize that these are merely estimates based on descriptions of locations given in records and reports, many of which were very general (e.g., "Rupert Area"). The GPS coordinates were estimated so that maps could be developed showing a general overview of historic YBCU sightings (Figure 1a, 1b).



Of the 33 museums we contacted (Appendix A) only the Smithsonian, Idaho Museum of Natural History (Idaho State University) and the Conner Museum (Washington State University) had YBCU specimens from Idaho.

Sampling Methodology. Based on our discussions with the YBCU workers in Arizona, California, and Utah, we slightly modified the existing protocol for our surveys (Appendix B) and developed a field data sheet (Appendix C). We examined the historic records and segregated them into five state zones: Northern, Central, Western, South-central, and Southeastern Idaho with 6, 6, 14, 10 and 40 records, respectively. We then made efforts to contact the original observer for each record, or someone familiar with the habitat at each record site, to determine whether the location was currently suitable for YBCU nesting. We omitted sites which were not considered suitable YBCU habitat from our survey plans. We contacted qualified birders in each zone and assembled a team of volunteers to conduct YBCU surveys. We provided the protocol description, call-back tapes, location of historic records, and data sheets to volunteers. We encouraged volunteers to survey not only the sites of historic records, but adjacent areas of similar habitat and other areas of suitable YBCU habitat known to them. Because of the preponderance of historic records from Southeastern Idaho, we augmented the volunteer effort with a team of four technicians assigned to survey the entire Snake River Corridor in suitable habitat from American Falls Reservoir, upstream to Palisades Dam and from the confluence of the Henry's Fork and the South Fork of the Snake River upstream to St. Anthony, Idaho.

Results of 2003, 2004, and 2005 Surveys.

North Idaho. – We identified two sites in Northern Idaho which we believed had suitable YBCU habitat: White Bird Hill and Lawyer Creek. Regrettably, we were initially unable recruit reliable volunteers to survey these areas and, consequently, we were unable to survey these sites in 2003. In 2004 surveys were conducted along White Bird Creek. No YBCU were positively identified. The local Fish and Game non-game biologist opined: "The habitat seems marginal. There are a couple of marginal cottonwood galleries (~50-75m in width) strung together along the creek for a couple of miles (J. Sauder, *in litt*). However, a local landowner, with admittedly little birding experience but with "some of the best cottonwood habitat in the area" (J. Sauder, *in litt*.) reported hearing a calling YBCU in reasonably good habitat on July 24, 2004, near White Bird Creek (Table 3a, 3b). Because of the landowner's lack of birding experience, this was not considered a confirmed record.

A single YBCU was recorded in Coeur d'Alene near the golf course on June 9, 2004 (S. Sturts, *in litt*.) (Table 3a, 3b). This was only the second record from Kootenai County; the first in 109 years!

The area along White Bird Creek where a land owner reported hearing a YBCU in 2004 was surveyed by an experienced birder in 2005. No YBCU were recorded along White Bird Creek and there were no reports on 2005 of YBCU in Northern Idaho. Based on the few historical records and our surveys, we conclude sightings of YBCU are extremely rare in Northern Idaho. The preferred habitat is generally lacking. The few recorded sightings are most likely of



transient, nomadic, or migrant individuals. There are no data to suggest this species historically nested, or currently nests, in Northern Idaho.

<u>Central Idaho</u>. – In 2003 we surveyed Penal Gulch near Challis, Idaho, and along the Big Wood River near Stanton Crossing south of Bellevue, Idaho. No YBCU were observed in Penal Gulch. We believe the habitat here lacks the thick understory preferred by YBCU, and that the historic sightings in Penal Gulch were probably of migrant, vagrant, or transient birds. We did observe YBCU on two occasions south and west of Stanton Crossing, south of Bellevue, Idaho. Two birds were recorded (one observed, one heard) on July 5, and one responded (vocal) to a tape on July 19, 2003 (Table 2a, 2b; Figure 2). One YBCU was recorded in a rural yard just north of Salmon on June 26, 2003.

In 2004, two (possibly three) individual YBCU were recorded at Stanton Crossing on July 2 (Table 3a, 3b; Figure 3). One bird was observed for 1.5 hours, made two calls and disappeared.

Although routine surveys were not conducted near Stanton Crossing in 2005, historic and recent records (2003 and 2004) indicate YBCU occur in the area fairly regularly each year during the breeding season. Consequently, it is likely at least one pair nests in the area. Other suitable habitat on private lands, inaccessible during our surveys, may support other breeding pairs

Western Idaho. – Most of the historic-record sites in this zone do not contain suitable habitat for nesting YBCU. We suspect previous records for Prairie, Dive Creek, Battle Creek/Crane Creek, Thorne Creek and Jarbidge were most likely of migrant, vagrant, or transient birds. Similarly, the Swan Falls Dam area and the Fort Boise Wildlife Management Area (WMA) do not appear to have significant preferred YBCU habitat, although it is possible they did historically. In 2003, we concentrated our surveys in the Southwest Idaho zone at Lake Lowell (Deer Flat National Wildlife Refuge) and along the Weiser River between Cambridge and Goodrich where habitat appeared suitable. Although we conducted four complete rounds of surveys in these areas, no YBCU were recorded in either area

Based on the 2003 results, we did not conduct routinized surveys in southwestern Idaho in either 2004 or 2005. We were not notified of any sightings by local birders in Western Idaho in 2004 or 2005, nor were any reports of YBCU sightings in western Idaho posted on IBLE. We suspect that YBCU do not breed in Western Idaho.

<u>South-central Idaho</u>. – Like the other zones, many of the historic records in this zone were vague in describing the location of sightings (e.g. "Rupert area"). In 2003, volunteers conducted surveys at two areas in this zone, one with historic records (Lake Walcott State Park [Minidoka National Wildlife Refuge], near Rupert) and another with potentially suitable habitat (Cottonwood WMA, south of Kimberly). In 2003, no YBCU were observed at either site. Because the habitat at Cottonwood WMA did not appear to have the necessary overstory and thick understory components required by YBCU, this area was not surveyed in 2004 or 2005. No YBCU were recorded from Minidoka NWR in 2004.



On May 25, 2005, a single YBCU was sighted near Minidoka National Wildlife Refuge. It was flushed from sagebrush near a riparian zone. This bird was believed to be a migrant bird. This was the only YBCU observed in South-central Idaho in 2005. Data suggest that although Minidoka NWR is an occasional stopover site for migrating YBCU in Idaho, they do not nest there.

Southeast Idaho. – Over half (51% -- 40 of 78) of the historic YBCU records in Idaho were from this zone; most from the Snake River Corridor. In 2003, we examined recent (1997) aerial photographs of the river corridor and determined approximately 150 river miles contained habitat which appeared suitable for YBCU. Between June 1 and July 31, 2003, TREC personnel and volunteers conducted routinized, systematic surveys along the Snake River Corridor. We visited most sites at least twice during 2003, and some three times. Volunteers also conducted surveys at Market Lake WMA and Camas NWR, starting in late May. In 2003, YBCU were recorded on three occasions at Camas NWR (May 25, May 29, and June 8 [two birds]), and once at Market Lake WMA (June 11; Table 2a, 2b; Figure 2). The dates of these sightings, coupled with the fact neither of these areas have extensive habitat of tall overstory and thick understory used by YBCU for nesting, suggest these were migratory or transient birds. We recorded YBCU ten times on the main stem of the Snake River in 2003, generally < 10 km upstream of American Falls Reservoir (Table 2a, 2b; Figure 2, 3). With the exception of Deer Parks Wildlife Mitigation Unit and some adjacent private lands (three birds observed June 11), there is little suitable YBCU nesting habitat between Blackfoot and the confluence of the South Fork and Henry's Fork of the Snake River. In 2003, YBCU were recorded on 13 occasions along the South Fork of the Snake River (Table 2a, 2b; Figure 2). No YBCU were recorded in 2003 along the upper 30 miles of the South Fork or along Henry's Fork. Data collected by Tribal biologists on the Ft. Hall Indian Reservation were not made available. No YBCU nests were located in 2003.

In 2004, YBCU were observed in the same general areas: Camas NWR; on the Main Snake River just above American Falls Reservoir and at Deer Parks WMU; and on the South Fork of the Snake River between Lorenzo and Heise (Table 3a, 3b; Figure 3). These areas were routinely surveyed between June 26 and July 30, 2004. On June 26, a pair was observed copulating on Butler Island near the Railroad Crossing (Table 3a, 3b). At least two distinct pairs were observed in 2004 (Table 3b). No YBCU nests were located in 2004.

In 2005, YBCU were observed at Camas NWR, Main Snake River between American Falls Reservoir and Blackfoot, upstream from the Menan Boat Ramp near confluence of the North Fork and South Fork of the Snake River, and on the South Fork of the Snake River Between Heise and Lorenzo (Table 4a, 4b; Figure 4). Although several routine surveys were conducted between May 26 and July 22, 2005, YBCU were observed at Deer Parks WMU. On June 23 near McTucker Creek a pair was observed copulating and carrying sticks into a thick patch of willows (Table 4a, 4b). On June 14 near Twin Bridges, on the South Fork of the Snake River, a possible nest from the previous year was located (Table 4a, 4b). Three pairs and one single YBCU were observed immediately south of Twin Bridges on June 16, 2005. In subsequent surveys, no more than three individuals were recorded. Along with two (possibly three) adults, a



juvenile YBCU was observed on July 14 on the South Fork of the Snake River below the Railroad Crossing (Table 4a, 4b), thus confirming successful nesting of YBCU in the area in 2005. In 2005 a minimum of five pairs of YBCU were observed along the Upper Snake River corridor in 2005 (Table 4a, 4b).

Rare Animal Observation Report Forms were filled out for each 2003, 2004, and 2005 YBCU record and submitted to Idaho Department of Fish and Game's Conservation Data Center (Appendix D, IDF&G Copy only).

CONCLUSIONS

Historic records suggest that although YBCU have been recorded in scattered locations throughout the state, YBCU have never been particularly abundant in Idaho. The few historic records prior to 2002 (78 records in > 100 years) suggest YBCU are extremely rare in Idaho. Although we tallied over 90 sightings in the past three years, many of these birds were likely migrants or transients, and some of our records were likely repeats of the same birds. Hence, we conclude Yellow-billed Cuckoos are indeed rare migrants and summer residents in Idaho. Historic records and our surveys both indicate YBCU are most abundant in Southeastern Idaho, particularly along the Snake River corridor. No YBCU have recently been reported from the western side of the state. Whether historic records were of migratory or transient birds, or whether there has been significant changes in YBCU habitat is unknown. Based on the dates we observed birds, it is likely YBCU nested in Idaho in five locations: (1) near Stanton Crossing, in Blaine County in 2003 and 2004, (2) along the main stem of the Snake River below Tilden Bridge in 2003, 2004, and 2005, (3) near Menan at Deer Parks WMU in 2003 and 2004, (4) along the South Fork of the Snake River near Twin Bridges in 2003, 2004, and 2005, and (5) on Butler Island not far from the Railroad Bridge over the South Fork of the Snake River north of Archer in 2003, 2004, and 2005. The gallery cottonwood community along the Snake River above American Falls Reservoir and near Deer Parks WMU, and along the South Fork of the Snake River from below Heise to the Lorenzo Bridge, appears to be the stronghold for YBCU in Idaho. In 2004 and 2005, strong evidence was found to confirm breeding (copulations wer observed) and suggest nesting (e.g. YBCU carrying nesting material) in these stronghold areas. The observation of a juvenile YBCU in 2005 near the Railroad Bridge on the South Fork of the Snake confirms at least one successful nesting attempt.

It was our intention for this project to conduct surveys at sites where YBCU were historically recorded and, presumably, in the best remaining YBCU habitat in Idaho. We also recognize the probability that other suitable habitat elsewhere in the state was not surveyed. None-the-less, we believe we have identified most, if not all, of the strongholds for the species in the state. Based on our results, we estimate the statewide nesting population at fewer than 20 pairs, and in all likelihood, closer to 10 pairs in an average year.

For long-term monitoring of the status of the YBCU in Idaho, we suggest weekly call-back surveys during the month of June at the stronghold locations: Stanton Crossing, McTucker Creek, Deer Parks, Twin Bridges, and the Railroad Crossing over the South Fork of the Snake River near Archer. Surveys should follow our established protocol.



ACKNOWLEDGEMENTS

Funding for this project was provided by the Idaho Department of Fish and Game through the State Wildlife Grant Program, the USDA Forest Service, Caribou-Targhee National Forest Challenge Cost Share/Partnership Program, and the USDA BLM Idaho Falls Field Office Challenge Cost Share Program. Brigham Young University, Idaho, the Shoshone Bannock Tribes, and the Idaho Department of Fish and Game, and TREC, Inc., provided in-kind support. TREC, Inc., technicians conducting surveys in 2003 were Jenny Ricks, Carrie Jo Cobb, Jeremy Dodds, and Chad Hinckley. Jenny Ricks coordinated the technician and volunteer survey efforts along the Snake River, and organized the 2003 data. Troy Parkin, BYU-I, and Jenny Ricks researched and assembled the majority of the historic YBCU records. TREC technicians in 2004 were Cam Collins, Chad Hinckley, Troy Parkin, Lori Hansen, and Adam St. Saviour. Chad Hinckley consolidated 2004 data and developed GIS maps. TREC technicians in 2005 were Chad Hinckley and Cam Collins. Field volunteers and others providing records of YBCU sightings included Craig Fosdick, Dave Stricklan, Sherry Whitfield, Jason Wright, Kit Struthers, Charles Trost, Eddie Chew, Steve Bouffard, Darren Clark, Greg Rice, Elise Faike, Joel Tinsley, Robert Davis, Joseph Timchak, Jonathan Dudley, Mark Collie, Kent Fothergill, Carol Morris, Tim Cramer, and Patty Isaeff. We thank Karen Rice, Joe Lowe, Monica Zimmerman, Josh Rydalch and Jason Wright, of the BLM, for helping us gain access to lands and providing a jet boat on several occasions. We particularly thank Bud Alford of the Forest Service, for his generous donation of time, supplies, and other support in 2003. In 2003, David Anderson, former Idaho Department of Fish and Game Manager of the Deer Parks Wildlife Mitigation Unit, provided access and assistance surveying the WMU. In 2004, Pam O'Hearn did the same. We thank Dr. Dan Stephens, Wenatchee Valley College, for providing his list of historic sightings prior to 1996. We also thank Shirley Struts for sharing her data base and identifying an error on historic sightings in our 2003 report. We give special thanks to Mr. Dave Stricklan, BYU-I, for his keen interest, beneficial discussions, and solid support (time, materials, and intellectual effort) for this project.



LITERATURE CITED

- Burleigh, T.D. 1972. Birds of Idaho. The Caxton Printers, LTD., Caldwell, ID.
- Davis, W.B. 1935. An analysis of the bird population in the vicinity of Rupert, Idaho. Condor 37:233-238.
- Groves, C.R., B. Butterfield, A. Lippincott, B. Csuti, and J.M. Scott. 1997. Atlas of Idaho's Wildlife. Idaho Department of Fish and Game Nongame and Endangered Wildlife Program, Boise.
- Halterman, M.D., T. Corman, M. Johnson and R. Magill. 2002. Draft Wetsern Yellow-billed Cuckoo Natural History Summary and Survey Methodology. Southern Sierra Research Station, Weldon, CA.
- Larrison, E. J., J. L. Tucker, and M. T. Jollie. 1967. Guide to Idaho birds. J. Idaho Acad. Sci. 5: 1-220.
- Magill, R.T and M.D. Halterman. 1999. Natural history and suggested survey methods for western Yellow-billed Cuckoos in Arizona. Draft unpublished manuscript. Arizona Game and Fish Department, Nongame Branch, Phoenix, AZ.
- Merrill, J.C. 1897. Notes on Birds of Fort Sherman, Idaho. Auk 14:353.
- National Audubon Society 1996. Audubon Field Notes 50:974.
- Rogers, T.H. 1978. Northern Rocky Mountain Intermountain Region. American Birds 32:1034, 1188.
- Rogers, T.H. 1979. Northern Rocky Mountain-Intermountain Region. American Birds 33:882.
- Rogers, T.H. 1981. Northern Rocky Mountain-Intermountain Region. American Birds 35:962.
- Rogers, T.H. 1982. Northern Rocky Mountain-Intermountain Region. American Birds 36:(unk).
- Rogers, T.H. 1984. Northern Rocky Mountain-Intermountain Region. American Birds 38:1042.
- Rogers, T.H. 1985. Northern Rocky Mountain-Intermountain Region. American Birds 39:940.
- Rogers, T.H. 1986. Northern Rocky Mountain-Intermountain Region. American Birds 40:501.
- Rogers, T.H. 1991. Northern Rocky Mountain-Intermountain Region. American Birds 42:1139-1141.



Stephens, D. A. and S. H. Sturts. 1991. Idaho bird distribution. Idaho Museum of Natural History, Special Publication No. 11. 76 pp.

Taylor, D.M. 2000. Status of the Yellow-billed Cuckoo in Idaho. Western Birds 31:252-254.

Taylor, D.M., and C.H. Trost. 1987. The status of rare birds in Idaho. Murrelet 68: 69-93.

USFWS 2001. Update and refresh records on rules adopted in 1996 local competition docket. 66 FR 143:38611-38626.

Weber, J.W. and E.J. Larrison. 1977. Birds of southeastern Washington. University of Idaho Press, Moscow.



Table 1a. Verified historic sightings of Yellow-billed Cuckoo in Idaho

Record No. A Date Ye 1 7.30 18 2 6.13 19 3 5.16 19 4 7.22 19 5 6.01 196	95 JCME ^C 13 18 WBDA 22 FHKE 6(?) LOJE 78 JIHE	# Observed 1 1 Rare 3 egg set Many	Location Fort Sherman (Coeur D'Alene area) Weiser Rupert Area, Minidoka Co. Rupert, Minidoka Co.	Zone 11 11 12 12	UTMs ^B Easting 516858 502794 286854	Northing 4830763 4900381 4833793
1 7.30 18 2 6.13 19 3 5.16 19 4 7.22 19	13 18 WBDA 22 FHKE 6(?) LOJE 78 JIHE	3 egg set	Weiser Rupert Area, Minidoka Co. Rupert, Minidoka Co.	11 12	502794 286854	4900381
3 5.16 19 4 7.22 19	18 WBDA 22 FHKE 6(?) LOJE 78 JIHE	3 egg set	Rupert Area, Minidoka Co. Rupert, Minidoka Co.	12	286854	
4 7.22 19	22 FHKE 6(?) LOJE 78 JIHE	3 egg set	Rupert, Minidoka Co.			4833793
	6(?) LOJE 78 JIHE		•	12		
5 6.01 196	78 JIHE	Many	Marks Disal Lill		282077	4724486
0.01		4	White Bird Hill	11	556981	5072158
6 06.06 19	70 1011	1	Ft. Boise WMA, Canyon Co.	11	500765	4850587
7 7.02 19	וווענ אי	1	Minidoka WMA; manager's residence window	12	281256	4728920
8 05.15 19	78 GEAS	2	Ft. Boise WMA, Canyon Co.	11	500772	4850714
9 Summer 19	78 DAST	2	Lake Lowell	11	524561	4822617
10 7.01 19	79 PRCO	2	Prairie, Elmore CO.	11	609843	4819343
11 8.01 19	79 MAMC	Many	Lawyer Creek	11	555236	5113300
12 8.01 19	BO DAWA	3	Cartier Slough WMA	12	426868	4852438
13 7.03 19	31 CHTR	1	Portneuf River below Pocatello	12	377227	4750780
14 6.19 19	B2 MICA	1	S. Fork Payette River, W of Lowman	11	610498	4882099
15 Late June 19	B3 MACO	1	Grimes Pass	11	595216	4879354
16 6.01 19	84 JERU	1	Twin Falls	11	707612	4717949
17 6.24 19	84 KIST	1	Minidoka WMA	12	297427	4727965
18 07.18 19	84 WISH	1	Rupert	12	274099	4721876
19 7.28 19	84 WISH	2	Rupert	12	274099	4721876
20 8.10 19	84 KADU	1	Corner of Pine Cone Rd. & Indian Hills Dr.	11	501139	5174350
21 8.24 19	84 CHTR	1	Pocatello	12	382986	4746428
22 5.23 19	35 JICL, ALSA	3	Dive Creek	11	690684	4819268
23 6.22 19	85 CHTR	1	Swan Falls Dam south	11	550254	4787856
24 06.26 19	•	1	Rupert	12	274099	4721876
25 6.29 19	85 KIST	1	Minidoka WMA	12	295668	4727368
26 07.01 19	35 JOTI	1	Pocatello	12	382986	4747958
27 7.04 19	85 CHTR	3	McTucker Creek	12	366646	4766013
28 04(?):01 19	36 JOTI	1	Blackfoot	12	391046	4782694
29 06.01 19	86 CHTR	1	Shelley/Firth	12	405388	4803697
30 06.01 19		2	Blackfoot	12	391046	4782694
31 6.08 19		1	Firth – window kill	12	402721	4795682
32 07.25 19	36 WISH	1	Rupert	12	274099	4721876



Table 1a. Verified historic sightings of Yellow-billed Cuckoo in Idaho

				eu Guckoo III I		_	UTMs ^B	
Record No. ^A	Date	Year	Observer	# Observed	Location	Zone	Easting	Northing
33	7.26	1986	CHTR	2	Tilden Bridge area	12	377340	4775375
34	Unknown	< 1987	UNKN	2	Kendrick	11	527621	5162878
35	05.01	1987	WISH	1	Rupert	12	274099	4721876
36	6.12	1988	CHTR	3	Tilden Bridge south	12	376170	4775397
37	06.20	1988	MARA	1	3 mi east of Rigby	12	421810	4835718
38	7.04	1990	CHTR	1	Tilden Bridge	12	378108	4838401
39	June	1991	VISA	2	Near Rexburg	12	429459	4855298
40	July & Aug	1991	ALLA, DAHA	Multiple	Daggett Creek	11	582279	4836486
41	6.21	1991	VISA	3	Snake River/Sunnydell West Quad.	13	434570	4836953
42	6.24	1991	HABR	1	Snake River/Sunnydell West Quad.	12	434569	4836952
43	6.25	1991	VISA	1	Snake River/Sunnydell West Quad.	12	436772	4836952
44	7.4	1991	JOTI	3	Snake River	12	375974	4775011
45	7.15	1991	HABR	1	Snake River/Butler Island	12	444022	4831546
46	7.17	1991	HABR	1	Snake River/ LaBelle Northeast Quad	12	431861	4841080
47	5.01(?)	1992	VISA	2	South Fork of Snake River, Island (Butler Island?)	12	440681	4834822
48	7.15	1992	DOJO	1	Moscow, ID	11	509890	5258908
49	07.22	1995	CAVV	1	Main Snake; Tilden Bridge	12	376970	4776056
50	6.23	1996	JODO	2	Butte Creek (Battle Creek?)		UNKNOWN	
51	7.07	1996	JOGA	1	Mud Lake WMA	12	388556	4868823
52	7.14	1996	CHTR	2	Camas NWR	12	398650	4868715
53	07.07	1997	POWP, BRST	1	Hayspur Fish Hatchery	11	727001	4806345
54	5.29	1998	CHTR	1	Tilden Bridge	12	376975	4775965
55	06.08	1999	MACO, FLKN	1	SE Boise, Barber Park	11	571752	4822833
56	Summer	1999	VISA	Few pairs	Ririe, Twin Bridges	12	440235	4834994
57	6.24	2000	DOGI	1	560 Church St., Newdale	12	451501	4859881
58	6.25	2000	ELFA	1	Penal Gulch, Challis	11	723908	4935338
59	7.02	2000	JAWE	1	Challis	11	730451	4827204
60	7.1	2000	GEDE	1	Camas NWR	12	399133	4869333
61	07.15	2000	COSW	2	Boise	11	564112	4829087
62	8.03	2000	MAJO	1	NE Boise, Near Thorn Creek	11	587053	4844251
63	5.28	2001	DAMI	1	Camas NWR	11	399505	4865634
64	6.24	2001	DATR	4	Big Wood River/ Hwy 20	11	716190	4800678



Table 1a. Verified historic sightings of Yellow-billed Cuckoo in Idaho

UTMs^B Record No.^A Date Year Observer # Observed Location Zone Easting Northing 65 6.25 4770 E. 65 S. 2001 **KAJO** Idaho Falls 12 417627 4810081 66 June & July MAJO Thorn Creek 597577 4844570 2001 Unknown 11 67 7.09 2001 **CLWE** 1.5 miles below Twin Bridges 12 436011 4837860 68 7.09 2001 **CLWE** South Fork Snake River, 3 miles N of Ririe 12 437118 4834193 **CLWE** 69 7.12 2001 1-2 miles above Byington access 12 446871 4829431 70 JOTI Jensen's Grove, Blackfoot 7.19 2001 12 390055 4784812 71 5.22 2002 DACL Camas NWR 12 397938 4865782 72 6.05 2002 **GRRI** Market Lake 12 408758 4847695 73 GRRI 6.06 2002 Market Lake 12 405865 4849996 **GRRI** 74 Medicine Lodge 6.17 2002 12 387749 4901664 Confluence of Henry's Fork & Teton River 75 6.23 2002 CLWE 12 432569 4860857 76 Upstream from Heise Bridge 7.19 2002 **BUAL** 12 444442 4831807 77 JIKL Jarbidge, Owyhee Co. 611023 8.11 2002 11 4687186 78 **CLWE** South Fork Snake River, below Twin Bridges 9.05 2002 12 439573 4835046

^B With few exceptions, locations are best estimates based on available data; datum generally NAD 27.

•	Observ	er	Co	des

Α	LLA	Al Larsen	FHKE	F.H. Kenagy	JAWE	Jane Westervittt
Α	LSA	Alan Sands	GEDE	Gerry Deustcher	KDUM	Kas Dumroese
В	BUAL	Bud Alford	GEAS	Golden Eagle Audubon Society	KAJO	Karen Jones
В	RST	Brian Sturges	GRRI	Greg Rice	KIST	Kit Struthers
С	CAVV	Carole Vande Voorde	HABR	Harold Brown	LOJE	Lois Jenkins
С	HTR	Chuck Trost	JICL	Jim Clark	MACO	Mark Collie
С	CLWE	Cliff Weiss	JIHE	Jim Heckathorn	MICA	Mike Carmondy
D	ACL	Darren Clark	JDHI	J.D. Hill	MAJO	Marlin Jones
D	AHA	Dave Hazelton	JODO	John Doremus	MAMC	Marlene McKee
D	AWA	Dave Wagner	JOGA	John Gatchet	PRCO	Pricilla Cook
D	OGI	Doug Gibson	JIKL	Jim Klott	POWP	Poo Wright Pullman
D	OJO	Don Johnson	JCME	J.C. Merrill	SSTU	Shirley Sturts
D	IMA	Dale Miller	JRIC	Jenny Ricks	UNKN	Unknown
D	AST	Dan Stephens	JERU	Jeff Ruprecht	WBDA	William B. Davis
D	ATR	Dave Trochlell	JOTI	Joel Tinsley	WISH	William Shillington
Е	LFA	Elaine Faike	JOSH	John Shipley	VISA	Vickie Saab



^A Bolded numbers are historic records from D. Stephens and/or S. Sturts (e-mail data bases)

Table 1b. Notes and references for Verified historic sightings of Yellow-billed Cuckoo in Idaho

Record No.	NOTES	REFERENCE
1		Merrill 1897
2	USNM No. 240097; Locater Q08B12. Collected by L.E. Wyman	
3	Nest found in Rupert vicinity by Dr. Fayer Kenagy	Davis 1935
4	Collecter: F H Kenagy	Burke Museum: U. Washington
5	About a dozen birds nesting	Larrison et al., 1967
6	One banded	Rogers 1978
7	J.D. Hill	Taylor 2000
8		Rogers 1978
9		Rogers 1978
10		Rogers 1979
11	Possible Nesting Area	Idaho Conservation Data Center
12	Probable Nesting Area	Idaho Conservation Data Center
13		Rogers 1981
14		Rogers 1982
15		Note from Mark Collie to T. Reynolds Sept '03
16	Window Kill	Rogers 1984
17		Struthers Journal Entry
18	One bird	Rogers 1984
19	Bill Shillington	Rogers 1984
20	Moscow	K. Dumroese, Journal Entry
21	IMNH Specimen #2149	Taylor 2000
22	Probable Nesting Area; Observed by Boise District BLM	Idaho Conservation Data Center
23	Probable nesting area; heard one bird just above dam at 2000 hrs.	Trost Journal Entry
24	Stayed until July 29	Rogers 1985
25	South Side of the River, Cottonwoods	K Struthers, Journal Entry
26 27	Bannock Co. Probable Nesting Area: Sould beard 2 Near Spake Biver entrance to American Falls	S. Sturts data base (Am Birds 39: 940) Idaho Conservation Data Center
27	Probable Nesting Area; Saw 1, heard 2. Near Snake River entrance to American Falls Reservoir	idano Conservation Data Center
28	One Bird	S. Sturts data base (Rogers 1986)
29	Window Kill. IMNH Specimen #2476	Taylor 2000
30	Two heard in early June	S. Sturts data base (Am Birds 40:1231)
31		Rogers 1986
32	Stayed around until late July	S. Sturts data base (Am. Birds 40:1231)
33	First - 1/2 mi below Bridge, Bingham County near trout farm. 2nd - 2 hour float	Trost Journal Entry



Table 1b. Notes and references for Verified historic sightings of Yellow-billed Cuckoo in Idaho

Record No.	NOTES	REFERENCE				
	downstream	-				
34		Weber & Larson 1977 (in Taylor 2000)				
35	Bird lingered (but no dates given)	S. Sturts data base (Am Birds 41:465)				
36	Probable nesting area; One near boat ramp, two along N. bank three miles down river	Trost Journal Entry				
37	In yard	S. Sturts data base (Rare Bird Report 9-B-88)				
38	One responded to a tape about two hours float down from Tilden Bridge	Trost Journal Entry				
39	Along South Fork of Snake River	Rogers 1991				
40	Multiple "mobs": Second hand report	Note from M. Collie to T. Reynolds Sept. 2003				
41	Observed one bird calling at 6:45. Heard one calling at 8:55	Idaho Conservation Data Center				
42	Heard one call	Idaho Conservation Data Center				
43	Probable Nesting Area; Observed one bird calling at 10:30	Idaho Conservation Data Center				
44	Between Blackfoot and American Falls Reservoir	Rogers 1991				
45	Probable Nesting Area; Seen by Harold Brown at 0900: Reported by Vicki Saab	Idaho Conservation Data Center				
46	Probable Nesting Area; Seen by Harold Brown: Reported by Vicki Saab	Idaho Conservation Data Center				
47	Adults incubating and perched near nest	Status Change Form				
48	Hit window; prepared as specimen Conner Museum, #03-527	Report from DJOH to SSTU				
49	One observed by several observers	S. Struts data base (Birdnotes Sep. 1995)				
50	Pair	NAS Field Notes 50:974 1996				
51		NAS Field Notes V50:974 1996				
52	Two responded to tape, first grove of Cottonwoods near headquarters	Trost Journal Entry				
53		ID Birders Linked Electronically (IBLE)				
54	Came to a tape played in riparian bottomlands along Snake, 2 miles down river from Tilden Bridge	Trost Journal Entry				
55	Single bird	Note from M. Collie to T. Reynolds, Sept. 2003				
56	Few nesting pairs found through the season: Probable Nesting Area	Taylor 2000				
57	Found dead near Woodshed	IBLE, Specimen				
58	Very vocalized, perched in bare tree	IBLE				
59	Same bird seen by Elise Faike on June 25, 2000	IBLE				
60	Camas NWR, flew into large Cottonwoods, NE of Headquarters	IBLE				
61	One pair with fledgling observed	North American Birds 54(4): 403				
62	Junction of Thorn Creek Rd. and FR 203 (Bald MT. Rd.); Probably a migrant	IBLE				
63	Seen with Black-Billed Cuckoo, IBLE 2287	IBLE				
64	Close to Stanton crossing	Idaho Conservation Data Center				



Table 1b. Notes and references for Verified historic sightings of Yellow-billed Cuckoo in Idaho

Record No.	NOTES	REFERENCE
65	Window kill; found dead on porch (ISU)	IBLE
66	Second hand report	Note: M. Collie to T. Reynolds, Sept. 2003
67	Where power lines cross	Weiss Journal Entry
68	Single Adult	IBLE
69	Heard it once; not positive ID	IBLE
70	Flew into Cottonwoods alining river	IBLE
71	Flew low in Box Elders and flushed high into cottonwoods	IBLE
72	Around 10:00 -11:00 in the morning	IBLE
73	Western shelterbelt of Market Lake	IBLE
74	NW of Dubois	IBLE
75	Located 80 yards up the Teton River	Weiss Journal Entry
76	Responded to call; mature Cottonwood stand, brush understory	Idaho Conservation Data Center
77	Small tree-covered island, SW of Sparlin Island, S of Bennett Ck.	Rare Animal Observation Report
78	"kowlp" call repeated over and over	IBLE

^A Bolded numbers are historic records from D. Stephens and/or S. Sturts (e-mail data bases)



Table 2a. 20	003 Yellow-k	oilled Cucl	koo records			UT	M		
Record	Date	Year	Observer ^A	No. Obs	Location	Datum	Zone	Easting	Northing
1	05.25	2003	CHTR	1	Camas NWR	NAD 27	12	399133	4869333
2	05.25	2003	FRRE	1	McTucker Creek	NAD 27	12	366646	4766013
3	05.28	2003	JERI	1	Stinking Springs	WGS 83	12	447590	4828136
4	05.29	2003	DACL	1	Camas NWR	NAD 27	12	399133	4869333
5	06.05	2003	JERI	1	Twin Bridges	WGS 83	12	438594	4835832
6	06.06	2003	DACL	1	South Fork of Snake River	NAD 27	12	439982	4834429
7	06.06	2003	DACL	1	South Fork of Snake River	NAD 27	12	440104	4834808
8	06.06	2003	DACL	1	South Fork of Snake River	NAD 27	12	439775	4835101
9	06.07	2003	JOTI	1	Snake River below Blackfoot	NAD 27	12	377458	4781512
10	06.08	2003	GRRI	2	Camas NWR	NAD 27	12	398650	4868715
11	06.11	2003	JERI	3	Deer Parks Wildlife Mitigation Area	WGS 83	12	418422	4846651
12	06.11	2003	GRRI	1	Market Lake	NAD 27	12	405865	4849996
13	06.12	2003	CHTR	1	Riverton Sportsmans Access	NAD 27	12	381410	4778105
14	06.12	2003	CHTR	1	Jackson's Trout Farm	NAD 27	12	376218	4773807
15	06.12	2003	CHTR	1	Jackson's Trout Farm	NAD 27	12	376038	4773451
16	06.16	2003	CHTR	1	McTucker Ponds	NAD 27	12	365817	4766042
17	06.16	2003	CHTR	1	Snake River	NAD 27	12	365090	4765156
18	06.18	2003	JEDO	1	McTucker Springs	WGS 83	12	374295	4771122
19	06.19	2003	JEDO	1	McTucker Springs	WGS 83	12	365971	4765749
20	06.20	2003	CHTR	1	McTucker Springs	NAD 27	12	365388	4765834
21	06.24	2003	JEDO	1	Upstream from Twin Bridges	WGS 83	12	439333	4834882
22	06.25	2003	LEGA	1	Big Wood River/ Hwy 20	WGS 83	11	715501	4800677
23	06.26	2003	LUHA	1	N of Salmon	WGS 83	12	272614	5011314
24	07.02	2003	JOCO	1	South Fork of Snake River	WGS 83	12	434360	4839340
25	07.02	2003	JEDO	1	South Fork of Snake River	WGS 83	12	433360	4840112
26	07.05	2003	TIRE	2	ca. 0.5 km SW Stanton Crossing	WGS 83	11	717013	4800427
27	07.10	2003	JEDO	1	South Fork of Snake River	WGS 83	12	430236	4841790
28	07.10	2003	JOCO	1	South Fork Of Snake River	WGS 83	12	431099	4840595
29	07.10	2003	JOCO	1	South Fork of Snake River	WGS 83	12	431352	4840361
30	07.11	2003	JOCO	1	South Fork of Snake River	WGS 83	12	438690	4835604
31	07.11	2003	CHHI	1	Twin Bridges	WGS 83	12	438594	4835832
32	07.19	2003	TIRE	1	ca. 1 km SW Stanton Crossing	WGS 83	11	716578	4800470



Table 2a. 2003 Yellow-billed Cuckoo records, Continued

A	Ωh	car	vΔr	Coc	عما

BOLU Bob Lugar
CHHI Chad Hinckley
CHTR Chuck Trost
DACL Daren Clark
FRRE Frank Renn
GRRI Greg Rice
JOCO Jo Cobb
JEDO Jeremy Dodds

JEDO Jeremy Dodds
JERI Jenny Ricks
JOTI Joel Tinsley
LEGA Lee Garwood
LUHA Lucinda Haggas
TIRE Tim Reynolds



Table 2b. Notes and Sources for 2003 Yellow-billed Cuckoo sightings

Record	Notes and Sources for 2003 Yellow-billed Cuckoo signtings Notes	Source
1	East of the Old Refuge House	IBLE
2	Where Snake River meets American Falls	Charles Trost E-mail
3	Upstream of Stinking Springs about a mile	J. Ricks field notes
4	Flew into Cottonwoods from Siberian Pea Plant	D. Clark E-mail
5	Upstream of Twin Bridges, One flew over, didn't respond to call	J. Ricks
6	About half a mile down from Railroad Crossing	Phone Message; E-mail
7	About half a mile down from Railroad Crossing	Phone Message; E-mail
8	About half a mile down from Railroad Crossing	Phone Message; E-mail
9	Window kill ca. 2 mi N Tilden Bridge	E-mail
10	Found on Redstart Lane near creek	IBLE
11	One flew directly overheard; heard two others	Saw and heard It
12	Around the Shelterbelt	IBLE
13	"coo" call spontaneously	Trost Journal Entry; E-mail
14	~ 1 mile down from Tilden Bridge, NW Side of Snake R.; responded to tape with "coop" and "kip-kip-kip"	Trost Journal Entry; E-mail
15	200 yards from previous sighting. Responds to tape with "coop" and "kip-kip-kip" above head	Trost Journal Entry; E-mail
16	Corner of NE pond edge along road toward springs; "kit-kit-kit" calls in response to "koop-koop" calls	Trost Journal Entry; E-mail
17	Snake R. W of McTucker ponds, $\sim \frac{1}{4}$ mile upstream from boat ramp, "kit-kit" calls in response to "koop-koop" calls	Trost Journal Entry; E-mail
18	Flew in was silent until tape finished	Dodds Journal Entry
19	Called before tape was played	Dodds Journal Entry
20	McTucker Springs, 100 m south of the SW pond along the spring	Trost Journal Entry; E-mail
21	Flew in unobserved about 10 feet above ground in thin tree; Called repeatedly for about 3 minutes, then flew	Dodds Journal Entry
22	Near Stanton Crossing at Gaging Station	R. Garwood E-mail
23	0700 One bird calling @ 1812 Dogwood Ln., Salmon. T22N R22E SE ¼ SE ¼ Sec. 19	Rare Animal Obs Report
24	Flew in close to upper canopy after entire tape played. It called after about 30 seconds	Cobb Journal Entry
25	After 3rd tape call, faint call in distance heard; after 5th call on tape, faint call was heard again, no sighting	Dodds Journal Entry
26	One bird flew in to tape and called softly x 4. A 2nd distant bird also called.	Reynolds data sheet
27	No visual, heard to right	Dodds Journal Entry
28	Flew in during tape, called after tape once. Flew into upper canopy	Cobb Journal Entry
29	Responded to Other side of tape, called during first big pause, then didn't call again	Cobb Journal Entry
30	Only heard the call; Called after third tape call, didn't call again	Cobb Journal Entry
31	Seen & heard	Hinckley data sheet
32	Audio response to tape	Reynolds data sheet



Table 3a. 2004 Yellow-billed Cuckoo records	UTM
	A

Record	Date	Year	Observer ^A	# Obs	Location	Datum	Zone	Easting	Northing
1	06.05	2004	DACL, CLWE	1	S. Fk Snake R., RR ^B Bridge below Heise	NAD 27	12	440000	4834806
2	06.09	2004	JOWE	1	Vista Drive, Coeur d' Alene	NAD 27	11	513712	5283650
3	06.24	2004	CHTR	1	Jackson's Trout Farm, Snake R.	NAD 27	12	376081	4773391
4	06.26	2004	CHHI, DACL	2	S. Fk Snake R., RR Bridge Below Heise	NAD 27	12	440484	4834771
5	06.26	2004	CHHI, DACL	1	S. Fk Snake R., RR Bridge Below Heise	NAD 27	12	440196	4834639
6	06.26	2004	CHHI, DACL	SAA^{C}	S. Fk Snake R., RR Bridge Below Heise	NAD 27	12	440195	4834623
7	06.29	2004	TRPA	1	S. Fk Snake R. near Byington	NAD 27	12	444964	4830651
8	07.02	2004	CACO	1	Stanton Crossing, Big Wood River	WGS 83	11	716948	4800449
9	07.02	2004	CACO	1	Stanton Crossing, Big Wood River	WGS 83	11	716842	4800305
10	07.02	2004	CACO	1	Stanton Crossing, Big Wood River	WGS 83	11	715594	4800637
11	07.12	2004	CHHI	4	Deer Parks WMU	NAD 27	12	416260	4847763
12	07.12	2004	TRPA	2	Deer Parks WMU	NAD 27	12	418241	4846704
13	07.12	2004	TRPA	3	Deer Parks WMU	NAD 27	12	416260	4847763
14	07.12	2004	TRPA	SAA	Deer Parks WMU	NAD 27	12	416468	4847863
15	07.13	2004	CHHI	2	S. Fk Snake R. below RR Bridge	NAD 27	12	439507	4835143
16	07.13	2004	CHHI	1	S. Fk Snake R. above Twin Bridges	NAD 27	12	438146	4835813
17	07.13	2004	LOHA	1	S. Fk Snake R. below Byington	NAD27	12	438970	4834994
18	07.13	2004	LOHA	SAA	S. Fk Snake R. below Byington	NAD27	12	439868	4835026
19	07.13	2004	TRPA	2	S. Fk Snake R. Twin Bridges area	NAD 27	12	439242	4835638
20	07.14	2004	BOLU	1	Labelle Area	NAD 27	12	429821	4838453
21	07.23	2004	ADSS	1	S. Fk Snake R.	NAD 27	12	435517	4838011
22	07.30	2004	TRPA	1	S. Fk Snake R. below Twin Bridges	NAD 27	12	437948	4835882
23	07.30	2004	DACL	1	Camas NWR, HQ area	NAD 27	12	398648	4868648

^A Observer Codes

ASSA	Adam StSaviour	CLWE	Cliff Weiss
BOLU	Bob Lugar	DACL	Darren Clark
CACO	Cam Collins	JOWE	John Weber
CHHI	Chad Hinckley	LOHA	Lori Hanson
		TRPA	Troy Parken

 $^{^{}B}RR = Railroad$

^CSAA = Same as above



Table 3b. Notes and Sources for 2004 Yellow-billed Cuckoo sightings

Record	Notes	Source
1	Single bird flew into taped call	D. Clark to T. Reynolds, E-mail
2	Single bird foraging in backyard	S. Sturts to T. Reynolds 6.18.04, E-mail
3	Single bird responded flew into taped call	C. Trost to T. Reynolds 6.24.04, E-mail
4	07:45 Pair YBCU observed mating. Cottonwood/Dogwood habitat	2004 Field Data Sheet
5	08:10 Solitary bird seen and heard ("kowlp"call). Cottonwood overstory; Russian olive & Dogwood understory	2004 Field Data Sheet
6	08:36 Followed calling bird to this location; no nest found. Cottonwood/Dogwood	2004 Field Data Sheet
7	06:10 Heard only; responded to tape.	2004 Field Data Sheet
8	05:52 Flew in-response to tape; called twice; perched in tree 1.5 hrs & disappeared. Cottonwood/Willow	2004 Field Data Sheet
9	08:20 Flew into tape; made two knocker calls; possibly same bird as 0552 sighting	2004 Field Data Sheet
10	09:38 Vocal response (knocking call) to tape from ca.100 m. Would not come in	2004 Field Data Sheet
11	09:00 One YBCU observed & 3 others heard. Thick willow with scattered cottonwood overstory	2004 Field Data Sheet
12	06:55 One YBCU observed, at least one other heard. Thick willows; no overstory	2004 Field Data Sheet
13	08:40 At least three YBCU calling; none observed. Thick willows; no overstory	2004 Field Data Sheet
14	09:30 3 YBCU calling. Likely same as above	2004 Field Data Sheet
15	08:30 Pair of YBCU heard & observed; unable to locate nest. Cottonwood/dogwood habitat	2004 Field Data Sheet
16	09:15 Heard one call only	2004 Field Data Sheet
17	07:45 Heard only; responded to "caw" Call. Cottonwood/chokecherry habitat	2004 Field Data Sheet
18	08:00 Same YBCU as above; observed and heard; infrequently responding to tape	2004 Field Data Sheet
19	08:32 At least two birds observed and heard; thick undergrowth	2004 Field Data Sheet
20	Late afternoon; heard only	Telecon – B. Lugar to T. Reynolds
21	09:00 Vocal response to tape; could not see or get additional responses. Cottonwood/chokecherry habitat	2004 Field Data Sheet
22	07:52 Vocal response to tape from "far away"	2004 Field Data Sheet
23	Single bird calling from tree by HQ building	D. Clark to T. Reynolds 7.30.04, E-mail



	Γ		

Record	Date	Year	Observer ^A	No. Obs	Location	Datum	Zone	Easting	Northing
1	5/25/2005	2005	STBO	1	Minidoka NWR	NAD 27	12	299957	4727962
2	5/27/2005	2005	CHHI	1 (a)	Twin Bridges	NAD 27	12	438653	4836177
3	5/27/2005	2005	CHHI	SAA	Twin Bridges	NAD 27	12	438769	4836177
4	5/27/2005	2005	CHHI	SAA	Twin Bridges	NAD 27	12	438803	4836167
5	5/27/2005	2005	TIRE	1 (a)	Twin Bridges	NAD 27	12	439100	4835538
6	5/27/2005	2005	TIRE	SAA?	Twin Bridges	NAD 27	12	439279	4835400
7	5/27/2005	2005	TIRE	SAA	Twin Bridges	NAD 27	12	438259	4835459
8	5/31/2005	2005	CHHI	1 (a)	Butler Island RR crossing	NAD 27	12	440488	4834823
9	6/14/2005	2005	CHHI	2	Twin Bridges	NAD 27	12	438576	4835830
10	6/14/2005	2005	CHHI	2	Twin Bridges	NAD 27	12	438647	4835865
11	6/14/2005	2005	CHHI	1	Twin Bridges	NAD 27	12	438796	4835867
12	6/14/2005	2005	CHHI	2	Twin Bridges	NAD 27	12	438889	4835875
13	6/15/2005	2005	TIRE	1	Butler Island RR crossing	NAD 27	12	440037	4834924
14	6/15/2005	2005	TIRE	1	Butler Island RR crossing	NAD 27	12	439858	4834971
15	6/16/2005	2005	CRFO	1	Camas NWF	NAD 27	12	441827	4863633
16	6/16/2005	2005	CHHI	1	Twin Bridges	NAD 27	12	438876	4836019
17	6/16/2005	2005	DACL	1 (a)	Twin Bridges	NAD 27	12		
18	6/16/2005	2005	CACO	1	Twin Bridges	NAD 27	12	439486	4835205
19	6/22/2005	2005	TIRE	1 (a)	Tilden Bridge Upstream	NAD27	12	381429	4778908
20	6/22/2005	2005	TIRE	SAA	Tilden Bridge Upstream	NAD 27	12	381804	4779544
21	6/22/2005	2005	CACO	1	Tilden Bridge Upstream	NAD27	12	381438	4779138
22	6/23/2005	2005	CH, DS	2	McTucker Island	NAD27	12	366569	4764536
23	6/23/2005	2005	CH, DS	1	McTucker Island	NAD27	12	366432	4764667
24	6/23/2005	2005	CH, DS	SAA (a)	McTucker Island	NAD27	12	366642	4764649
25	6/23/2005	2005	CH, DS	1, 1 (a)	McTucker Island	NAD27	12	366734	4764747
26	6/23/2005	2005	CACO	2	McTucker Island	NAD27	12	366756	4764422
27	6/23/2005	2005	CACO	SAA	McTucker Island	NAD27	12	366988	4764696
28	6/29/2005	2005	CACO	1 (a)	Lorenzo Upstream	NAD27	12	434729	4839221
29	6/29/2005	2005	CACO	SAA	Lorenzo Upstream	NAD27	12	434681	4839238
30	6/29/2005	2005	CACO	1 (a)	Lorenzo Upstream	NAD27	12	436633	4837049
31	6/29/2005	2005	CACO	SAA	Lorenzo Upstream	NAD27	12	436606	4836958
32	6/29/2005	2005	CACO	1	Lorenzo Upstream	NAD27	12	436699	4837031



YELLOW-BILLED CUCKOO SURVEY

Table 4a. 2005 Yellow-billed Cuckoo records Continued					ontinued	UTM					
	Record	Date	Year	Observer ^A	No. Obs	Location	Datum	Zone	Easting	Northing	
•	33	7/7/2005	2005	TIRE	1 (a)	Upstream from Menan boat ramp	NAD 27	12	424077	4845561	
	34	7/14/2005	2005	CACO	2	Butler Island RR crossing	NAD 27	12	440122	4834939	
	35	7/14/2005	2005	TIRE	1	Butler Island RR crossing	NAD 27	12	439990	4835152	
	36	7/15/2005	2005	JOLO	1	Butler Island RR crossing	NAD 27	12	439937	4834858	
	37	7/15/2005	2005	CACO	1	Butler Island RR crossing	NAD 27	12	439969	4834995	

Observer codes		No. Obs. Codes	
TIRE	Tim Reynolds	(a)	Audio observation only
CACO	Cam Collins	SAA	Likely same as bird as above
JOLO	Joe Lowe		
CRFO	Craig Fosdick		
DACL	Darren Clark		
CH, DS	Chad Hinckley & Dave Stricklan		
CHHI	Chad Hinckley		
STBO	Steve Bouffard		



Table 4b. Notes and Sources for 2005 Yellow-billed Cuckoo sightings

Record	Notes Notes	Source
1	Flushed from sagebrush near riparian area. Probably migrant bird.	S. Bouffard to T. Reynolds, Email
2	Played tape through heard a Knocker call 100m to the east.	2005 Field Data Sheet
3	Heard the same Bird call again, played tape bird moved away.	2005 Field Data Sheet
	Walking towards calling Bird, Cuckoo landed in a cottonwood directly above me stayed	
4	for about 3 min. and flew south.	2005 Field Data Sheet
5	Did not respond to knocker call 100m south of UTM.	2005 Field Data Sheet
6		2005 Field Data Sheet
7		2005 Field Data Sheet
8	Heard a knocker call 100m to the east, Stopped played tape and got no response.	2005 Field Data Sheet
	2 cuckoos sighted, one was directly above me, the other 70m to the North in dead	
9	cottonwood, one making the Kowlp call the other the coo call.	2005 Field Data Sheet
	A pair of cuckoos seen together. Possible nest from previous year located nearby.	
10	They made a variety of calls.	2005 Field Data Sheet
11	Cuckoo using coo call and a variety of others in top of cottonwood.	2005 Field Data Sheet
12	2 Cuckoos, one was the same bird as above, the other was making a variety of calls.	2005 Field Data Sheet
13	Knocker call 3 times, Kowlp Call once flew west.	2005 Field Data Sheet
14	Flew into call, Knocker once, Possibly same bird.	2005 Field Data Sheet
15		C. Fosdick to T. Reynolds, Email
	Cuckoo called using knocker call and landed in nearby cottonwood stayed 5 min. and	2005 Field Data Sheet
16	flew west.	
17	Responded to tape making "kowlp call" downstream from Twin Bridges.	2005 Field Data Sheet
18	Single bird Kowlp call. 80m to south flew to the north.	2005 Field Data Sheet
19	Possible call same bird as Cam.	2005 Field Data Sheet
20	Faint Knocker call.	2005 Field Data Sheet
21	Gave knocking call, perched in tree caught caterpiller, flew across river.	2005 Field Data Sheet
22	Came into call. A pair of cuckoos. May have moved back and forth between Cam.	2005 Field Data Sheet
23	Single bird responded to call, made knocker call.	2005 Field Data Sheet
24	Heard a call probably same bird as above.	2005 Field Data Sheet
25	Vocalized with out call from tape. Another bird vocalized to the south. Cuckoo came	2005 Field Data Sheet
	from thick dogwood understory, possible nest sight.	
26	McTucker Creek, 2 cuckoos responded to knocking calls, 2 copulations carrying sticks	2005 Field Data Sheet
	into a patch of willows 366731, 4764455. Flew in response to Chad's call.	
27	Knocking call back in the direction of previous pair probably the same birds.	2005 Field Data Sheet



Table 4b.	Continued Notes and Sources for 2005 Yellow-billed Cuckoo sightings	
28	Calling 200m to the east.	2005 Field Data Sheet
29	Watched bird at this location for 15 min. until it flew east.	2005 Field Data Sheet
Record	Notes	Source
30	Giving coo calls 175m to the east.	2005 Field Data Sheet
31	Got visual on above bird from this point. Calling from top of tall bare cottonwood. Bird is 70m from this location, thick understory.	2005 Field Data Sheet
32	Lost bird at this point it flew south, then came back and started calling again.	2005 Field Data Sheet
33	Possible coo call?	2005 Field Data Sheet
34	Flushed a bird here, another joined & remained very tight in this vicinity, calling occasionally, nest likely close by, juvenile seen.	2005 Field Data Sheet
35	Male calling observed for 1 hour, possibly four birds one juvenile.	2005 Field Data Sheet
36		2005 Field Data Sheet
37	Bird sitting high up in cottonwood, calling occasionally, left him to return to spot where 4 birds were seen 7/14.	2005 Field Data Sheet



Table 4b.	Continued Notes and Sources for 2005 Yellow-billed Cuckoo sightings	
28	Calling 200m to the east.	2005 Field Data Sheet
29	Watched bird at this location for 15 min. until it flew east.	2005 Field Data Sheet
Record	Notes	Source
30	Giving coo calls 175m to the east.	2005 Field Data Sheet
31	Got visual on above bird from this point. Calling from top of tall bare cottonwood. Bird is 70m from this location, thick understory.	2005 Field Data Sheet
32	Lost bird at this point it flew south, then came back and started calling again.	2005 Field Data Sheet
33	Possible coo call?	2005 Field Data Sheet
34	Flushed a bird here, another joined & remained very tight in this vicinity, calling occasionally, nest likely close by, juvenile seen.	2005 Field Data Sheet
35	Male calling observed for 1 hour, possibly four birds one juvenile.	2005 Field Data Sheet
36		2005 Field Data Sheet
37	Bird sitting high up in cottonwood, calling occasionally, left him to return to spot where 4 birds were seen 7/14.	2005 Field Data Sheet



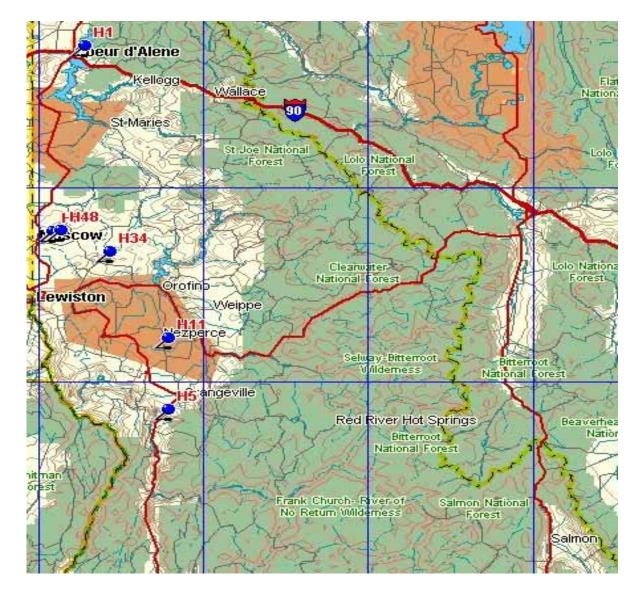


Figure 1a. Estimated locations of historic sightings of Yellow-billed Cuckoo in Northern Idaho.



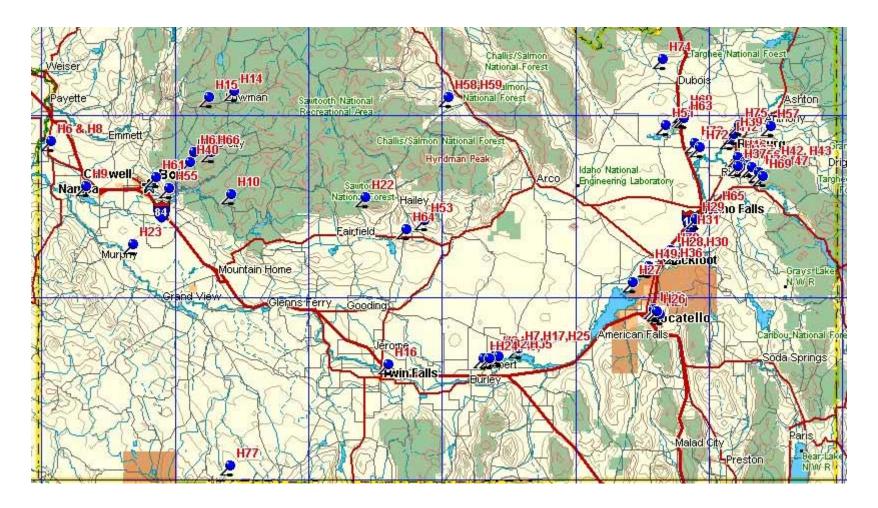


Figure 1b. Estimated locations of historic sightings of Yellow-billed Cuckoo in Southern Idaho.



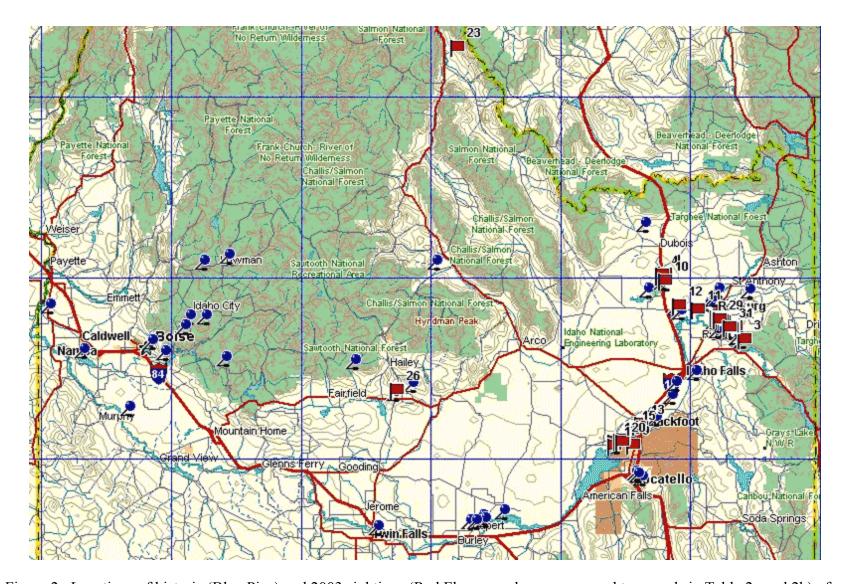


Figure 2. Locations of historic (Blue Pins) and 2003 sightings (Red Flags; numbers correspond to records in Table 2a and 2b) of Yellow-billed Cuckoo in Idaho.



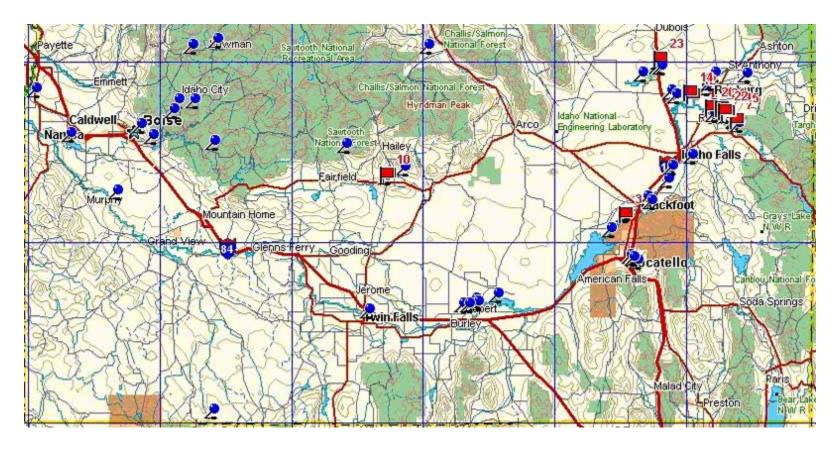


Figure 3. Locations of Historic (Blue Pins) and 2004 (Red Flags; numbers correspond to records in Table 3a and 3b) sightings of Yellow-billed Cuckoo in Idaho. The single sighting in 2004 in Coeur d'Alene in 2004 is not represented.



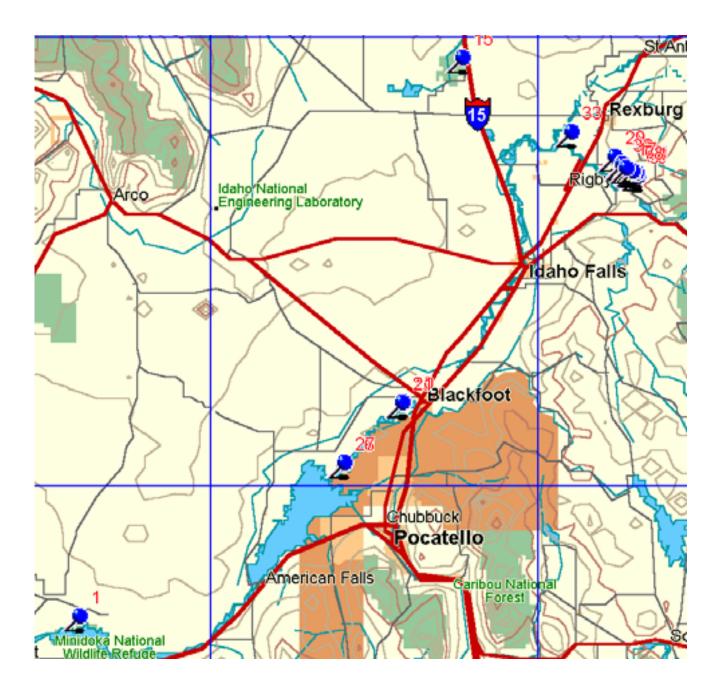


Figure 4. 2005 Yellow-billed Cuckoo sightings (Blue Pins); numbers correspond with records in Tables 4a, 4b.

APPENDIX A

Museums with Ornithological Collections contacted for Yellow-billed Cuckoo records.

Academy of Natural Sciences. Philadelphia, PA

Albertson College of Idaho. Caldwell, ID

American Museum of Natural History, New York, NY

Boise State University. Boise, ID

Brigham Young University - Idaho. Rexburg, ID

Cable Natural History Museum. Cable, WI

California Academy of Sciences Natural History Museum. San Francisco, CA

Carnegie Museum of Natural History. Pittsburgh, PA

Conner Museum, Washington State University, Pullman, WA

Cleveland Museum of Natural History. Cleveland, OH

Cornell University Museum of Vertebrates. Ithaca, NY

Dallas Museum of Natural History. Dallas, TX

Field Museum of Natural History. Chicago, IL

Florida Museum of Natural History. University of Florida, Gainesville, FL

Frank H. McClung Museum. University of Tennessee, Knoxville, TN

Harvard Museum of Natural History. Cambridge, MA

Idaho Museum of Natural History. Idaho State University, Pocatello, ID

Manchester Museum. Manchester, England, UK

Monte L Bean Museum. Brigham Young University. Provo, UT

Museum of Vertebrate Zoology, University of California, Berkeley, CA

National Museum of Natural History. Smithsonian Institution. Washington, DC.

Natural History Museum of Berne, Switzerland, EU

Natural History Museum of Los Angeles County. Los Angeles, CA

Peabody Museum. Yale University. New Haven, CT

Royal Ontario Museum. Canada

San Diego Museum of Natural History. San Diego, CA

Santa Barbara Museum of Natural History. Santa Barbara, CA

Slater Museum of Natural History. University of Puget Sound, Tacoma, WA

Sternberg Museum of Natural History. Fort Hays State University, KS

University of Alaska Museum. Fairbanks, AK

University of Michigan Museum of Zoology. Ann Arbor, MI

University of Bergen, Norway, EU

University of Idaho, Moscow, ID

Western Foundation of Vertebrate Zoology. Caramillo, CA



APPENDIX B

Yellow-Billed Cuckoo Protocol

Contact: Tim Reynolds at 208.745.6913

Objective:

The Yellow-billed Cuckoo (YBCU) is a candidate for Federal listing as a Threatened or Endangered species. It is at the edge of its range in Idaho. Less than 50 records of sightings exist since 1900. Our objective this project is to determine the current presence and distribution of YBCU in Idaho during the breeding season.

Equipment Needed:

- Portable Tape Recorder
- Pre recorded tape of Yellow-Billed Cuckoo
- Data sheet, writing instrument
- Map(s) and GPS Unit
- Binoculars

Survey sites:

Surveys are to be conducted in suitable habitat patches consisting of a tall cottonwood overstory with a 2-5 meter tall shrub understory. Suitable habitat patches are generally 5 acres or larger. Distinct habitat patches are separated from the adjacent patch by 300 m, and should be given distinct names/numbers, and surveyed independently. Narrow stringers of riparian vegetation connecting patches of suitable habitat should also be named/numbered and surveyed.

Survey dates, frequency, timing and intensity

Each patch of suitable habitat should be surveyed a minimum of four times at least 12 days apart, starting in late May or early June. Begin surveys at sunrise and stop at noon, or if the wind exceeds 8 mph. Afternoon surveys (18:00-20:30) can be effective, particularly just before or after a storm, when winds are light. Habitat patches less than 100 m wide can be surveyed from the edge. Transects through wider patches should be established parallel to and 100 m from the habitat edge.

Procedure:

Surveys use the call-back process. YBCU has four calls: the contact ("kowlp") call, ("ka-ka-ka-ka-ka-kow-kow-kowlp-kowlp-kowlp" or "ka-ka-ka-ka-ka-ka-kow-kowlp"); the "knocker" call (resembles series of knocks); the "cow" call ("cow-cow-cow" or "kow-kow-kow") and the warning call, described as a hollow knock. The contact call has proven most effective in eliciting YBCU call-back. The tapes provided have contact ("kowlp") calls at one minute intervals: ten calls per side.

- Upon arrival at survey site, record time and location on the data sheet, and wait quietly for 5 minutes.
- Play the tape: five calls one minute apart. Stop the tape. Record results.
- Move 100 meters, wait 5 minutes and repeat.
- Once a bird is detected, the call should not be repeated. Move on to the next patch. DO NOT search for a nest.
- Each time a cuckoo is detected, whether in response to the tape or casual call (not in response to the tape) or an observation, information should be recorded onto the data sheet. If no YBCU are found in a patch, "no detection" should be recorded.



APPENDIX C

Survey number (circle one) 1 2 3 4 5			Observer(s)					
Land Ownership _	Tem	perature _	Ap	proximate W	ind speed	Cloud co	ver (Estimate %)		
Site/Patch Name	GPS/UTM Coordinates	Time (MST)	Visual (V)	ected (Y or N) Auditory (A) lain on back)	Habitat (Oversto	ory/Understory)	ADDITIONAL COMMENTS		
				33			YELLOW-BILLED CUCKOO	SURVEY	

APPENDIX D

(IDAHO FISH AND GAME COPY ONLY)

Idaho Conservation Data Center

Rare Animal Reports

Reports for 2004 Yellow-Billed Cuckoo Observations