

JOB FINAL REPORT

State: California
Project Number: E-1-1 Project Title: Endangered Wildlife Program
Job Number: IV-1.4 Job Title: California Yellow-billed Cuckoo Survey, 1977
Period Covered: October 1, 1976-September 30, 1977 Job Type: Survey & Inventory

SUMMARY:

A survey to locate breeding populations and identify habitat requirements of the California yellow-billed cuckoo (Coccyzus americanus occidentalis) was conducted in California from June through August 1977. One hundred forty-one cuckoos were found along the Sacramento, Feather, South Fork Kern, Santa Ana, Amargosa and Colorado rivers, and in the Owens Valley. Most occupied sites were characterized by willows, dense low-level or understory foliage, high humidity and suitable foraging habitat in excess of 300 feet in width and 25 acres in extent. Published literature and museum records were researched to document historical occurrence of the yellow-billed cuckoo in the state.

BACKGROUND:

The California yellow-billed cuckoo is classified "Rare" by the California Fish and Game Commission. Recent efforts to acquire or preserve remnants of the riparian habitat essential for this species have made it necessary to determine which sites in the state are still occupied by cuckoos. The only previous major survey for this species in California (Gaines, 1974) was conducted in 1972-73 and was confined to the Sacramento Valley. The 1977 survey was conducted to re-inventory the Sacramento Valley and to check historical cuckoo sites and other apparently suitable habitat areas elsewhere in the state.

OBJECTIVES:

1. Document current and historical distribution and abundance of the California yellow-billed cuckoo.
2. Determine habitat characteristics of sites occupied by cuckoos.

PROCEDURES:

Areas of extensive riparian forest were determined from previous surveys, aerial photographs and topographic maps. Areas were surveyed on foot or by boat from June through August using taped recorded cuckoo calls to elicit responses from birds on territory. A number of stops were made in each area and at each stop the recorded calls were played at well-spaced intervals for 10 to 30 minutes. Where cuckoos were present, estimates were made concerning height and percent cover of canopy foliage, percent cover of woody understory foliage, species composition of woody vegetation and extent of habitat.

Surveys were made by David Gaines throughout the state and by Stephen Laymon in the Sacramento Valley. Observations made by other field ornithologists in the state were integrated in the survey results.

Past distribution of the yellow-billed cuckoo was determined by Gaines through a review of the literature and of specimen and egg sets in 12 major museum collections in California and Arizona.

FINDINGS:

Survey findings are in:

Gaines, D. 1977. Current status and habitat requirements of the yellow-billed cuckoo in California. Unpubl. manuscript. 94 pp. plus 24 figs. and 41 maps.

Appendix 1 to the manuscript, giving the areas surveyed in 1977 and the number of cuckoos found in each area, is attached.

Portions of the manuscript are being prepared for publication. The entire manuscript, including topographic maps of all areas surveyed and photographs of many areas where cuckoos were found, is held in Department of Fish and Game files in Sacramento.

ANALYSIS:

This study provides information relative to the current abundance and distribution of yellow-billed cuckoos in the larger patches of riparian forest remaining in California. The information obtained is needed to set priorities for acquisition of riparian habitat and to direct other management actions to preserve the species.

RECOMMENDATIONS:

The following recommendations are based on the findings and recommendations of the study report:

1. Determine land ownership of riparian forest presently occupied by yellow-billed cuckoos.
2. Preserve such forest by fee acquisition, conservation easement or other means, in blocks of not less than 25 acres per cuckoo territory.
3. Protect riparian habitat from clearing for agriculture, chipping, channelization, bank stabilization, ground water depletion and other threats.
4. Retain backwaters, oxbows, marshes and other wetlands associated with riparian habitat suitable for cuckoos.
5. Preserve dense growths of woody vegetation, especially willow, cottonwood and mesquite.
6. Restore willow, cottonwood and mesquite vegetation wherever feasible, particularly adjacent to habitat currently occupied by cuckoos.
7. Monitor cuckoo populations and habitat annually or biannually until a statewide recovery of the cuckoo population is evident.

8. Survey additional riparian habitat in the following areas: Laguna de Santa Rosa, Sonoma County; Clear Lake, Lake County; Little Lake Valley, Mendocino County; vicinity of Humboldt Bay, Humboldt County; Shasta and Klamath rivers, Siskiyou County; Pit River, Modoc, Lassen and Shasta counties; Susan River and Honey Lake Wildlife Area, Lassen County; Surprise Valley, Modoc County; Salinas and Nacimiento rivers, Monterey County; Coon and San Luis Obispo creeks, San Luis Obispo County; Camp Pendleton, San Diego County; Owens Valley, Inyo County; and Mojave River, San Bernardino County.
9. Retain yellow-billed cuckoo on state list of rare species.

LITERATURE CITED:

Gaines, David. 1974. Distribution, density and habitat requirements of the California yellow-billed cuckoo in the Sacramento Valley, 1972-73. Calif. Dept. of Fish and Game, Special Wildlife Investigations, Project PR-W-54-R-6, 20 pp.

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State of California
THE RESOURCES AGENCY
Department of Fish and Game

Appendix 1. California and Arizona Localities Surveyed for Yellow-billed Cuckoos
During 1977.^{1/}

<u>Locality</u>	<u>Date</u>	<u>Time</u>	<u>Number Cuckoos</u>	<u>Principal Observer</u>
<u>NORTH COAST REGION</u>				
Little Lake Valley N. of Willits, Mendocino Co.	1 Jun.	0700-1200	0	Gaines
Clear Lake, Lake Co.				
Mouths of Kelsey, Cole, and Old Kelsey Cks., Clear Lake State Park	2 Jun.	0600-1000	0	Gaines
Mouth of Adobe Ck	2 Jun.	1030-1130	0	Gaines
Rodman Slough	2 Jun.	1200-1330	0	Gaines
<u>SACRAMENTO VALLEY REGION</u>				
Sacramento River				
Redding, Shasta County to Red Bluff, Tehama Co.				
Anderson River Park, mouth of Stillwater Ck. and vicinity	25 Jul.	0600-1100	0	Laymon
Goat Is., mouth of Battle Ck.	6 Jun.	0600-1100	0	Gaines
Mouths of Battle, Payne Cks.	21 Jul.	0600-1200	0	Laymon
Red Bluff to Tehama, Tehama Co.				
Red Bluff to Tehama (canoe)	19 Jun.	0800-1600	0	Laymon
Red Bluff to Tehama (canoe)	9 Jul.	0700-1500	0	Laymon
Todd and Mooney Islands	5 Jun.	0830-1130	0	Gaines
Todd and Mooney Islands	29 Jul.	0630-1300	1	Laymon
Tehama to Woodson Bridge, Tehama Co.				
Tehama to Woodson Br. (canoe)	7 Jun.	0530-1300	1	Gaines
Tehama to Woodson Br. (canoe)	10 Jul.	0630-1400	0	Laymon
Woodson Bridge State Park	8 Jul.	0630-0930	2	Laymon
Woodson Bridge to Hamilton City, Glenn Co.				
Woodson Bridge to Hamilton City (canoe)	1-2 Jul.	0630-1600	1	Laymon
Mouth of Jewett Creek	8 Jun.	0700-0800	1	Gaines
Mouth of Rice Creek	8 Jun.	0830-0930	0	Gaines
Hamilton City to Ord Ferry, Glenn Co.				
Pine Ck to Big Chico Ck. (car)	24 Jun.	0800-1000	0	Laymon
Pine Ck to Big Chico Ck (canoe)	11 Jul.	0600-1200	7	Laymon
Indian Fishery	8 Jun.	1000-1100	0	Gaines
E bank from Big Chico Ck. 1.5 mi. south (M & T Ranch)	12 Jul.	0650-1200	3	Laymon
Chico Landing to Ord Ferry (canoe)	29 Jun.	0600-1330	3	Laymon
Slough on W bank N of Ord Ferry (Ord Bend Co. Park)	14 Jun.	0630-0730	2	Gaines

^{1/} From: Gaines, D. 1977. Current status and habitat requirements of the yellow-billed cuckoo in California, 1977. Unpubl. manuscript. 94 pp. plus 24 figs. and 41 maps.

Appendix 1, continued.

<u>Locality</u>	<u>Date</u>	<u>Time</u>	<u>Number Cuckoos</u>	<u>Principal Observer</u>
Sacramento River				
Ord Ferry to Butte City, Butte Co.				
Ord Ferry to Butte City, west bank by car	14 Jun.	0730-1200	3	Gaines
Jacinto to Butte City (canoe)	18 Jul.	0630-1300	6	Laymon
Butte City to Colusa, Colusa County				
Butte City to 1.5 mi. N of Princeton (canoe)	18 Jul.	1300-1500	1	Laymon
1.5 mi. N Princeton to Hamilton Bend (canoe)	23 Jul.	0630-1330	5	Laymon
Cobbs Bend to Colusa State Park	31 Jul.	0600-1100	2	Laymon
Butte Sink, Butte & Sutter Counties				
	15 Jun.	0600-1200	1	Gaines
	24 Jul.	0630-1200	8	Laymon
	31 Jul.	1130-1300	1	Laymon
Colusa to Sacramento, Sacramento County				
Beaver Lake (Tyndall Landing) Yolo Co.	26 Jun.	1300-1400	0	Gaines
W bank 1.5 mi. S of I-5, Yolo Co.	28 Jun.	0700-0900	0	Gaines
Feather River, Sutter County				
E bank from the mouth of the Bear River south to the Garden Highway bridge	26 Jun.	0630-1030	1	Gaines
Bobelaine Audubon Sanctuary	26 Jun.	1040-1230	0	Gaines
Sacramento-San Joaquin Delta, Sacramento and San Joaquin Counties				
Cosumnes River between Twin Cities Rd. and Franklin Blvd.	27 Jun.	0630-0930	0	Gaines
East of Locke (Delta Meadows)	27 Jun.	1000-1200	0	Gaines
<u>CENTRAL COAST REGION</u>				
Salinas River from 0.5 mi. N to 1.2 mi. S of the Bradley Bridge, Monterey County	2 Jul.	0900-1230	0	Gaines
Nacimiento River 0.0 to 3.0 mi. W of Hwy 101, Camp Roberts Military Reservation, Monterey Co.	2 Jul.	1430-1830	0	Gaines
<u>SAN JOAQUIN VALLEY REGION</u>				
San Joaquin River				
0.6 to 1.4 mi. N of Airport Way (South County Park), San Joaquin County	29 Jun.	0630-0730	0	Gaines
W bank 0.0 to 1.0 mi. N of the mouth of the Stanislaus River, San Joaquin Co.	29 Jun.	0800-1100	0	Goines
0.0 - 0.5 mi. N of Grayson Rd. Bridge, Stanislaus Co.	30 Jun.	0900-1000	0	Gaines
E bank S of Brush Lake & W of sewage disposal ponds, Stanislaus Co.	29 Jun.	1300-1430	0	Gaines
Mendota Pool, Fresno Co.	1 Jul.	0945-1145	0	Gaines
Stanislaus River				
Caswell State Park, San Joaquin Co.	29 Jun.	1600-1900	0	Gaines
From mouth 1.5 mi. upstream, San Joaquin and Stanislaus Counties	30 Jun.	0600-0800	0	Gaines

Appendix 1, continued.

<u>Locality</u>	<u>Date</u>	<u>Time</u>	<u>Number Cuckoos</u>	<u>Principal Observer</u>
Merced River				
Between Snelling and Merced Falls, Merced Co.	30 Jun.	1050-1330	0	Gaines
Hatfield State Park, Merced County	30 Jun.	1600-1900	0	Gaines
	1 Jul.	0600-0830		
Kaweah River 0.0-2.0 mi. W of Lake Kaweah, Tulare County	3 Jul.	0700-1000	0	Gaines
Tule River 0.0-1.5 mi. below Lake Success	3 Jul.	0545-0630	0	Gaines
<u>SIERRA NEVADA REGION</u>				
South Fork Kern River, Kern County				
Vicinity of Bloomfield Ranch	14 Jul.	1130-1230	0	Gaines
From 0.5 mi. W to 2.0 mi. E of bridge on road to Onyx Ranch	13 Jul.	0600-1330	1	Gaines
From Onyx Ranch road 0.5 mi. E	12 Jul.	1830-2000	0	Gaines
SE of Onyx Ranch	13 Jul.	1730-1900	0	Gaines
From bridge on road leading N from Weldon 0.5 mi. E	4 Jul.	1145-1330	1	Gaines
From bridge on road leading N from Weldon to Sierra Way	4 Jul.	0630-1130	1	Gaines
From Sierra Way about 0.3 mi. E	3 Jul.	1630-1800	2	Gaines
From Sierra Way 2.0 mi. E	14 Jul.	0600-1100	4	Gaines
<u>SOUTH COAST REGION</u>				
Santa Clara River between Castaic Junction and Piru, Ventura Co.	22 Jul.	0630-0930	0	Gaines
Mouth of Santa Clara R., Ventura Co.	22 Jul.	1000-1200	0	Gaines
Harbor Park, Wilmington, Los Angeles Co.	7 Aug.	0700-1000	0	Gaines
Santa Ana River, Riverside County				
1.0-2.0 mi. downstream from University Ave., Santa Ana Regional Park	20 Jul.	0600-0900	1	Gaines
	8 Aug.	0700-0930		
Van Buren bridge 1.0 mi. downstream	20 Jul.	0930-1100	0	Gaines
1.0 mi. above to 0.3 mi. below River Road, Prado Co. Park	21 Jul.	0600-1100	0	Gaines
N bank 0.3-0.6 mi. W of River Rd. (Prado Co. Park)	20 Jul.	1130-1300	1	Gaines
	8 Aug.	1000-1100	0	Gaines
Prado Flood Control Basin from Prado Dam 1.0 mi. N	24 Jul.	0730-1100	1	Gaines
San Joaquin Marsh Preserve, Univ. Calif. Irvine, Orange Co.	23 Jul.	0630-1100	0	Gaines
San Luis Rey River near Bon-Sall, San Diego Co.	24 Jul.	1200-1400	0	Gaines
<u>MOJAVE DESERT REGION</u>				
Owens Valley, Inyo County				
Owens River between Big Pine & Tinnemaha Res.	5 Jul.	1800-2000	0	Gaines
Baker Creek 1.5 mi. W of Big Pine	10 Aug.	0700-1100	0	Gaines

Appendix 1, continued.

<u>Locality</u>	<u>Date</u>	<u>Time</u>	<u>Number Cuckoos</u>	<u>Principal Observer</u>
Owens Valley Ranch 2.0 mi. SW of Big Pine	15 Jul.	1500-1700	0	Gaines
	16 Jul.	0700-1300	3	Gaines
	9 Aug.	0700-1200	0	Gaines
Hogback Cr. NW of Alabama Hills 6.0 mi. NW of Lone Pine	16 Jul.	1800-2000	1	Gaines
Amargosa River 0.2-1.0 mi. S. of Tecopa, Inyo Co.	17 Jul.	0530-0830	2	Gaines
Mojave River at Afton Canyon, San Bernardino Co.	17 Jul.	1600-1900	0	Gaines
Mojave River from Bear Valley Cut-off to Mojave Narrows, Mojave Narrows Regional Park	18 Jul.	0600-1300	0	Gaines
Big Morongo Wildlife Sanctuary, San Bernardino Co.	18 Jul.	1600-2000	0	Gaines
	19 Jul.	0630-1100	0	Gaines
<u>LOWER COLORADO RIVER REGION</u>				
Mojave Valley Division				
W. bank between Needles and the Nevada line (Fort Mojave Indian Reservation)	31 Jul.	1145-1300	0	Gaines
W. bank E of Needles (municipal golf course S to sewage disposal ponds)	31 Jul.	1000-1030	0	Gaines
	1 Aug.	0545-0600	2	Gaines
E. bank from Bridge Rd. to Beal Lake, Havasu N.W.R. (Topock Swamp)	31 Jul.	1030-1130	0	Gaines
		1800-2000	2	Gaines
	1 Aug.	0600-1100	3	Gaines
Park Moabi trailer park	1 Aug.	1130-1230	0	Gaines
Havasu Division				
Bill Williams River from its mouth to Planet Ranch, Havasu N.W.R.	30 Jul.	0600-1300 1600-2000	11	Gaines
Parker Division				
W. bank from Parker Dam to Earp (Parker Strip)	31 Jul.	0530-0900	0	Gaines
W. bank inside bend in river SE of Waterwheel Camp	29 Jul.	0530-1000	2	Gaines
Horse Island and vicinity	2 Aug.	0600-0900	0	Gaines
Trailer parks along W bank between Waterwheel Camp and the Palo Verde Dam	29 Jul.	1000-1200	0	Gaines
W. bank 0.7 mi. N of Blythe boat club (Clark Ranch)	3 Aug.	1000-1200	0	Gaines
Palo Verde Division				
W. bank at end of 10th Ave., 3.0 mi. ENE of Blythe (Big Hole)	2 Aug.	1800-2000	2	Gaines
E. bank N of Ehrenberg	27 Jul.	1800-2000	2	Gaines
W. bank 2.0-4.0 mi. S of Interstate 10 (Goose Flats)	1 Aug.	1830-2000	3	Gaines
W. bank from end of Lovekin Rd. 1.8 mi. S on levee road	3 Aug.	0600-0700	0	Gaines
Cibola Division				
W. bank from 35th St. Co. Pk. (Horace Miller Co. Pk.) to Cibola toll bridge	28 Jul.	0700-0830	1	Gaines
Oxbow Lake and vicinity SE of Palo Verde	3 Aug.	0700-0930	0	Gaines

Appendix 1, continued.

<u>Locality</u>	<u>Date</u>	<u>Time</u>	<u>Number Cuckoos</u>	<u>Principal Observer</u>
<u>LOWER COLORADO RIVER REGION</u>				
Cibola Division				
0.3 mi. N of Paymaster Landing (Walter's Camp) to Gilmore's Landing	28 Jul.	0700-0830	1	Gaines
Gilmore's Landing	5 Aug.	0630-0700	1	Gaines
Gilmore's Landing to N end of Walker Lake (boat)	4 Aug.	0600-0700	0	Gaines
Imperial Division				
Walker Lake to Lighthouse Rock, Imperial N.W.R. (boat)	4 Aug.	0700-1200	8	Gaines
Lighthouse Rock to S end of Picacho State Park (boat)	5 Aug.	0700-1300	9	Gaines
Picacho State Park	27 Jul.	0600-1100	2	Gaines
Ferguson Lake	26 Jul.	1000-1200	1	Gaines
Laguna Division				
Laguna Dam to Imperial Dam	25 Jul.	1830-2000	6	Gaines
	26 Jul.	0700-0930	3	Gaines
		1900-2000	2	Gaines
Yuma Division				
W. bank 1.5 mi. below Laguna	26 Jul.	0600-0700	0	Gaines
W. bank between Winterhaven and Pilot Knob Power Plant	26 Jul.	1730-1830	1	Gaines