

THE KIMBALL JOURNALS: AN ARCHIVE OF HISTORICAL BIRD OBSERVATIONS FROM THE SACRAMENTO VALLEY, CALIFORNIA

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Historical information on bird distribution and abundance is invaluable to understanding the change in avian populations and diversity that has resulted from landscape modifications, climate change, and establishment of non-native species. Evaluations of these effects, however, are often limited by the lack of historical baseline information or observation records. Archiving past observation records from birders remains a challenge. As birders pass on, their families often must make decisions as to the disposition of personal field notes. A few are donated to museums or other archives, or interested parties, but most are discarded and lost forever (Engilis 2002). Fortunately, some individuals adhered to the teachings of Joseph Grinnell and his students, in maintaining well written field journals. Grinnell's teachings on how to maintain a journal, species accounts, and specimen catalog, today simply called the Grinnell Method, is still taught and followed in many universities (Herman 1980). Museum -trained scientists adhere strongly to this method as do many field biologists that chronicle their observations for archival purposes around the United States.

Elizabeth (Betty) Kimball embraced the Grinnell Method for species accounts and willingly used it to chronicle bird observations reported by birders from the greater Sacramento area for nearly four decades (Perrone and Manolis 2013). This was no minor feat, as all bird observations of the time were submitted to Betty either by phone (locals) or by letter and then transcribed by hand. From 1950-1983, Betty amassed an unprecedented chronicle of bird observations. This note describes the content, accessibility, and uses of the bird records compiled by Betty and to make known the availability of this valuable reference material for use by scientists and amateur ornithologists.

CONTENTS OF THE JOURNALS

The Kimball Journal Collection (Kimball Journals) consists of the complete, original species accounts of birds reported to Betty Kimball from birders in the Sacramento Checklist Region (nine volumes) and the personal species accounts of Betty and Harold Kimball (six volumes). The Kimball Journals are archived at the University of California, Davis Museum of Wildlife and Fish

Biology (MWFB). These volumes are available to view upon request and are an invaluable resource to address questions related to bird distribution, abundance, occurrence, colonization, habitat use and other topics for the Sacramento Valley.

Most long-time birders from Sacramento know the Kimball Journals as those that summarized observations from the Sacramento Checklist Area (Highway 20 on the north, Highway 12 on the south, and the 1,000 foot contour east and west). The Kimball Journals documented observations from 1950 to at least 1983 for over 300 species of birds. Betty served as the rare bird alert and listserv of that time for birders of the region. She maintained a phone tree for rare bird observations; when she called, one knew something good was about to be relayed. The list of observer names in the accounts is a who's who of early California birders: Rich Stallcup, David Gaines, David Winkler, Jack Wilburn, Guy McCaskie, Ed Harper, Ed Greaves, Jeri Langham, Tim Manolis, and others.

All of the records were hand written on 5½ x 8½ pages and maintained in cloth binders. Most pages were double sided, a deviation from Grinnell but necessary due to space concerns. On average a volume has 180 double sided pages of species accounts yielding about 350 pages of records per binder for a total of over 3,000 pages total! With an average of 33 species records per page, in nine volumes, they contain an estimated 100,000+ observation records.

It is important to note that Betty did not render decisions on the validity of records. Her philosophy was to record everything and let those who were interested in the records vet their validity; thus she injected no bias into the species accounts. Fortunately, Betty organized these records taxonomically and they were written with clear and impeccable hand writing.

The trend for reporting started slowly in the 1950s but increased until peak reporting from 1966-1980 (only 10% of the records were pre-1960). The Purple Martin account is a good example of a journal page (Figure 1). Betty closely tracked the Purple Martin colonies in Sacramento. There are eight pages of entries summarizing 266 martin observations during this time frame.

The personal collection of species accounts summarized results of the Kimballs' birding around the United States, with emphasis on California. Among their bird observations were many personal letters, news articles, and cards related to bird issues in the State and beyond. The personal volumes also include observations beyond the Sacramento Region by friends of the Kimballs. Her personal records date back to 1941 for many species and are comprehensive for the Sacramento Region. It is interesting to peruse the personal collection as Betty relates her observations of many species for the first time.

Purple Martins

page 3

- 1976: $7/29 = 2 \text{ or } 3 - \text{PM} - \text{returning from ponds (Aub. Sew. Tr.)} - \text{B. Barnes}$
 $12/13 = 3 \text{ at least, among many swallows, low and high, over}$
W-X Freeway near Fower Theater on 16 and Broadway
 $4: \text{PM on his way home} - \text{A. Engilis}$
- 1977: $3/18 - 2 \text{ prs} - 29^{\text{th}} \text{ St} \times \text{Cap. Ave.} - \text{G. Higgins}$ $7/21 = \text{pr} - \text{there}$
 H. Kimball $7/26 = 3 - \text{Am. R. NAHS area} - \text{A. Engilis}$ $7/29 = \text{pr} -$
 $29^{\text{th}} \times \text{Cap.} - \text{S. Young}$ $3/22 - \text{pr} - \text{access I80 from B. Barnes'}$
 $\text{yd.} \rightarrow \text{not using Martin house in '76 or '77} - \text{B.B.}$
 $4/12 = 1 - \text{Florin Rd.} - \text{A. Engilis}$ $4/20 - \text{B. Davis}$ $4/27 = 5 - \text{I80} \times \text{Cap. Ave.}$
 $\text{J. Langham, D. Johnson}$ $4/26 = 3 \text{ or } 4 - \text{I80, } 1000' \text{ el.} - \text{B. Barnes}$
 $4/14 - 30^{\text{th}} \times \text{Cap. Ave.} - \text{Aldriches}$ $4/14 - \text{freeway} - \text{feeding} - \text{A. Engilis}$
 $4/27 = 2 \text{ } \sigma^2, 3 \text{ } \text{f} - \text{I80 at Cap. Ave.} - \text{D. Johnson}$ $6/8 - \text{Hwy 50 Tr.}$
 S. Young $7/29 = 0 \text{ } \sigma^2 = \text{I80} \times \text{J St.} - \text{A. Engilis}$ $8/10 = 1 - \text{last one}$
 $\text{overhead this season} - \text{H. Kimball}$ $8/20 = 3 \text{ young flying well,}$
 $\text{1 newly fledged? and ad } \text{f} - \text{p.m.} - \text{Kimballs}$ $7/28 = 3 - \text{Kimballs}$
 $8/27 = 1 - \text{Kimballs}$ $8/9 = 10^{\sim} - \text{ad r im} - \text{over orchard} - \text{I80, } 1000' \text{ el.}$
 B. Barnes $9/11 = 2^+$, $9/23 - \text{above B. Barnes', } 1000' \text{ el. I80, below}$
 Auburn $10/31 = 2 \text{ } \text{f} \times 3 \text{ } \sigma^2 \text{ among 400 Tree \& Barn Swallows over}$
 $\text{El Macero} - \text{A. Engilis}$ $10/27 - \text{some among swallows over Am. R.}$
 $\text{near Confluence, I5} - \text{C. Smith}$
- 1978: $3/24 = 0$, $3/28 = 0$, $4/2 = 0$, $4/3 = 0 \text{ } \sigma^2 \text{ } \text{f} - 35^{\text{th}} \times \text{T Sts} - \text{H. \& B. Kimball}$
 $4/3 = 0 \text{ } \sigma^2 - 29^{\text{th}} \times \text{Cap. Ave.} - \text{G. Higgins (C. Rendon - 451-9322 - study)}$
 $4/8 - \text{f} - \text{wingtip broken} - \text{SPCA called} - \text{delivered to Don \& Bev. Eddy} -$
 died during night $4/17 = 5 - \text{Kimballs' block AM, } - 20^{\text{th}} \text{ } \text{f} - 2 \text{ blocks}$
 $\text{N of Stockton Blvd. over Hwy. 50} - \text{D. Johnson}$ $7/26 = 8 - 35^{\text{th}} \text{ St.} - \text{Kimballs}$
 $5/3 = 7 - 3 \text{ } \text{f} - 35^{\text{th}} \text{ streets at T, } 2 - 29^{\text{th}} \times \text{Cap. Ave.} - \text{Kimballs} - \text{AM}$

Figure 1. Page 3 of the Kimball Journal's Purple Martin account, listing observations from 1976-1978.

Her first recorded observation of four California Condors (*Gymnogyps californianus*) is from 17 April 1957 at Lucerne Valley, San Bernardino County, as the birds “landed in field beside us!” Her report of an observation of the 3 December 1977 Snow Bunting (*Plectrophenax nivalis*) found at the base of Monticello Dam, Yolo County was very detailed, including a two page description of the bird and Betty’s typical prose in describing the bird’s behavior, “It moved rock chips aside by tiny side-sweep of the bill or “combed” goodies from dry weed stems...well camouflaged, could disappear by remaining motionless.” She recorded numerous observations like these throughout the Central Valley as well. These journals add a great many more observations for birds of the Sacramento Valley and should not be overlooked when using the Kimball Journals. Who knows what valuable historical records are hidden in Betty’s personal accounts?

USES OF THE KIMBALL JOURNALS

The original uses of the Kimball notes were to support the development of several editions of the Checklist of the Birds of the Sacramento Area (1963-1983). They also formed the foundation for the *Recent Observations* column in the Sacramento Audubon Society newsletter, *The Observer*. In recent decades, the Sacramento Checklist Area was essentially abandoned by birders in favor of county-wide checklists. Again the Kimball Journals proved invaluable for the creation of county checklists such as the published *Checklist of the Birds of Yolo County, California* (Yolo Audubon Society 2004).

Several authors have used the Kimball notes to review the historical occurrence of rare and accidental species. Most of these uses are the result of a modern observation which then necessitated the need for review of older records. For example, Conard (2004) in his reporting of the observation of the first Sacramento County record of Brown Pelican (*Pelecanus occidentalis*) used the Kimball Journals to provide a historical review of occurrences for the entire Sacramento Valley. He summarized all Brown Pelican reports from the Kimball notes and used those that had proper substantiation. These notes also allowed him to discuss past sightings with observers that were still living. Trochet and Engilis (2010) also used the Kimball Journals for the same purpose in describing the first Veery (*Catharus fuscescens*) specimen from the Central Valley and placing this specimen into context with observations; thus describing a spring trend in occurrences.

In addition, patterns or trends in the distribution and abundance of specific birds can be gleaned. Airola and Grantham (2003) used the Kimball Journals to detect changes in Purple Martin (*Progne subis*) abundance, distribution, and ecology when evaluating the nesting status of the species in the Sacramento region. Using notebook observations, they were able to demonstrate the transition of martin nesting habitats from downtown Sacramento buildings before the mid-1960s to use of both buildings and

elevated freeways and overpasses (bridges) during the mid-1960s to mid-1970s, and finally exclusive use of bridges after the mid-1970s. The notebooks also helped document the arrival time of the European Starling (*Sturnus vulgaris*) as a nesting species in the region. Its documented coincidence with the transition in martin use of nesting substrates supported the hypothesis that starling competition drove the shift in martin nesting habits in Sacramento and eliminated martin nesting populations from many other Central Valley towns and cities where the nest site transition by martins to bridges did not occur (Airola and Williams 2008). The unraveling of this complex, long-term change in habits and status of this species of special concern would not have been possible without the historical records in the Kimball Journals.

Several unpublished stories captured in the Journals also can be told. An example was the occurrence of Yellow-billed Cuckoo (*Coccyzus americanus*) in Foothill Farms/Citrus Heights in the 1970s. The first of a series of reports from Spruce Park (now called Foothill Community Park) in 1970, 1975, 1976 was followed by a bird found hit by a car on 1 July 1982 on Sunrise Boulevard, 4 miles from the park. That specimen was deposited into the MWFB (WFB 2073) and chronicles the occurrence of cuckoos in eastern Sacramento at that time. There have been no observations in that area since. The Kimball Journals also have been used to document the colonization of artificial bridges as nesting habitat by the White-throated Swift (*Aeronautes saxatalis*) (T. Manolis, in prep.) and in the preparing of an annotated checklist of the shorebirds of the Central Valley (Manolis and Tangren 1975).

These examples underscore the importance of the Kimball Journals in assessing the changes of birdlife, for the better or worse, in the Sacramento Valley. However, their long-term care and accessibility need to be addressed. The pages in the journals are not archival and are showing signs of foxing and damage due to use. There is a great need to digitize the actual journals and to stabilize the deterioration of the sheets. A more ambitious need is to add these records into an electronic database. This effort would require someone with knowledge of localities and birders of the region from that era.

A similar undertaking was accomplished at the Bishop Museum, Hawaii, where an observation archive was maintained by Robert Pyle and then subsequently entered to create the Hawaii Birds Sightings database (over 80,000 records). This effort led directly to the e-published monograph, *The Birds of the Hawaiian Islands: Occurrence, History, Distribution, and Status* (Pyle and Pyle 2009). If funding could be obtained, the journals could be scanned and digitized, a first step towards long-term survival and more accessible use of the records. Additional funding or extensive volunteer time would be needed to record journal information in a searchable database. Such an effort with the Kimball Journals would provide an invaluable archive of observations predating the internet era.

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