Winter Movements of Western Grebes and Clark's Grebes: Insights from Band Recoveries

*Diana L. Humple**
Point Blue Conservation Science
3820 Cypress Drive #11
Petaluma, CA 94954
*Corresponding author: dhumple@pointblue.org

Jay B. Holcomb
International Bird Rescue
444 W. Ocean Boulevard, Suite 777
Long Beach, CA 90802

ABSTRACT

We examined banding and encounter data provided by the U.S. Bird Banding Laboratory for Western Grebes (Aechmophorus occidentalis) *and Clark's Grebes* (A. clarkii) *from 1934 to 2011 to explore within-winter movements as well as between-year fidelity to wintering regions. Of the 3,428* Aechmophorus *grebes banded during this period, 156 encounters were reported, a recovery rate of 4.6%. The majority of the grebes (65%) were banded following rehabilitation, including from oil spills (32%), and most recoveries were of beachcast dead or debilitated grebes. Encounters revealed unexpected within-winter movements of* Aechmophorus *grebes, with approximately half of all within-winter encounters greater than 50 km from where they were banded and some greater than 400 km. Although the majority of between-year encounters indicated winter site fidelity, approximately one-third of those recovered in a subsequent year were in a different region. Numerous recoveries of birds banded after rehabilitation occurred within a few days to six months of release, while others occurred up to eight years later, indicating successful rehabilitation for some birds. Both the within- and between-winter patterns suggest a plasticity in Western and Clark's grebes, possibly due to variability in their marine environment and food resources. Band encounter data remain an often untapped yet useful source of insight into bird movements, especially for frequently beachcast species.*

INTRODUCTION

Although many species of birds have been shown to exhibit winter-site persistence (staying in the same region throughout the winter season; Merkel et al. 2006) or between-year winter site fidelity (returning to the same wintering area year after year; Robertson and Cooke 1999), such site faithfulness is lacking in some seabird species (Oppel et al. 2008, Dias et al. 2011). Few studies have examined movements in Western Grebes (*Aechmophorus occidentalis*) or Clark's Grebes *(A. clarkii)*, in part because of the challenges to capturing and tagging them. Consequently, little is known about their movements within their coastal wintering range or their fidelity to wintering regions. These sister species, which were split from "Western Grebe" into two species in 1985 (Storer and Nuechterlein 1992), breed in inland lakes in western North America and winter predominantly along the west coast from British Columbia to Baja California. Understanding their migratory and wintering patterns is critical for their conservation; they are highly vulnerable to oiling in winter in their near-shore environments (Storer and Nuechterlein 1992, Humple 2009) and appear sensitive to environmental changes, showing much interannual variability. Band encounter data that were previously summarized for Western Grebes emphasized migratory connectivity (Eichhorst 1992), while the many encounters reported since emphasize winter movements. We used North American banding and encounter data to identify patterns of within- and between-winter movements in Western and Clark's grebes and assess winter site fidelity in these species.

METHODS

We examined all North American banding and encounter data for Western and Clark's grebes provided by the USGS Bird Banding Laboratory (BBL) from 1934 to 2011. A total of 3,428 *Aechmophorus* grebes were reported banded during this period. These included 1,394 grebes designated as

"Western Grebes" before the two species were split that we reassigned post-hoc as "Western/Clark's Grebes" (WCGR; 1934-1985); 1,746 Western Grebes (WEGR; 1986-2011); and 288 Clark's Grebe (CLGR; 1986-2011). It is likely that most of the WCGR encounters were Western Grebes, as Clark's Grebes are less abundant overall and rare in the Canadian Prairie Provinces (Storer and Nuechterlein 1992) where many of the earlier bandings occurred.

We categorized encounters as either (1) between-season (i.e., revealing migratory connectivity between winter, migration, and/or breeding regions; e.g., banded in winter and recovered in summer), (2) between-year (i.e., banded one year, recovered in a subsequent year in same season), or (3) within-season (i.e., banded and recovered within the same season of the same year). Seasonal designations are challenging in *Aechmophorus* grebes as their migration and breeding phenology (Robison 2012, Humple et al. 2013) do not always follow typical patterns (e.g., is April migration or wintering?), so some categorization errors likely occurred. Except in our assessment of oiled birds, we restricted our study to between-year and within-season encounters in the nonbreeding periods (particularly winter), and examined fidelity to wintering sites within and between winters. We measured distance between banding and recovery locations in Google Earth, using the center of the 10-min block if a more specific location was not provided. We compared numbers of birds that moved a "short distance" (0-50 km) to those that moved a "long distance" (>50 km) with a Pearson X^2 test using the software program R (R Development Core Team 2011). Since for rehabilitated birds the banding location was typically the release location and not necessarily the location or region where the bird was originally captured, for the subset of individuals for which we had access to original capture location (digitized records from International Bird Rescue) we explored whether encounter data indicate fidelity to a wintering location, and compared birds that moved in the direction of initial capture location to those that did not with a Pearson X^2 test in program R (R Development Core Team 2011). We also separately assessed and provide details for all encounters (including between-season) of birds banded just prior to release following rehabilitation due to oiling.

RESULTS

Summary of bandings and encounters. Of the 3,428 *Aechmophorus* grebes banded from 1934-2011, 2,224 (65%) were banded following rehabilitation just prior to release (BBL bird status code 5 or 7), with 1,082 (32% of total and 49% of all rehabilitation bandings) reported as rehabilitated as a result of oiling (BBL extra info code 40). Half of all grebes banded were rehabilitated and banded by International Bird Rescue (formerly International Bird Rescue Research Center; Cordelia and San Pedro, CA).

During this period, a total of 156 *Aechmophorus* grebe encounters were reported to the BBL (4.6% of those banded), similar to but slightly higher than the previously reported rate (3.8%; Eichhorst 1992). This included 57 WCGR, 83 WEGR, and 16 CLGR. Ninety-eight encounters were new since Eichhorst (1992) published those results. Eighty-nine of the 156 encounters (57%) were of grebes banded in California by International Bird Rescue just prior to release and following rehabilitation, including due to oiling, and were predominantly coastal non-breeding birds when initially debilitated. All but 15 of these were from the last decade.

Encounters included 49 between-season recoveries, 31 between-year recoveries, and 76 within-season recoveries. Of the between-year and within-season encounters that were for the nonbreeding season (n=22 and n=76, respectively) and are the focus of this study, 97% were birds originally banded following rehabilitation, 97% were recoveries of an injured bird or beachcast carcass, and 99% were originally banded in California.

Between-winter encounters (site fidelity). Of the 22 records of nonbreeding-season between-year encounters, 16 showed evidence of winter site fidelity (recovered in subsequent winters in the general region where they were released), while six did not (Table 1). Those that did not included recoveries ranging from moderately (e.g., coastal Los Angeles County to coastal Santa Barbara County, CA) to extremely (e.g., one bird banded by Point Reyes Bird Observatory [now Point Blue Conservation Science] during the San Francisco Bay oil spill of 1971 was recovered two winters later in coastal Washington) far from the initial

banding location. One between-winter encounter is the only recovery to-date of a captive-reared bird, recovered eight years later in the region where it was released, placing it not far behind the 11 year old longevity record for the species (BBL, unpubl. data; http://www.pwrc.usgs.gov/BBL/longevity/Longevity_main.cfm [accessed 21 Dec. 2013]).

Within-winter encounters (site persistence). All within-season encounters reported were from the nonbreeding season (n=76). Although slightly more grebes (55%) were recovered relatively close to their release location (within 50 km) with 45% recovered farther away, this difference was not significant (X^2 = 0.42, P = 0.52). Of the longer-distance encounters, 14% were recovered over 200 km away and 8% over 400 km away (Fig. 1). Within-season encounters occurred one day to six months after banding, with the interval duration for even long-distance encounters sometimes relatively short. The more substantial of these movements include: a WEGR released in San Francisco Bay and recovered six weeks later on the north coast of California (Humboldt Co.), approximately 380 km away; two WEGRs and one CLGR released in San Francisco Bay and recovered two weeks to three mo later in the Morro Bay area (south-central coastal California), 280-355 km away; three WEGR and one CLGR released in the San Francisco Bay area and recovered one week to three mo later in south coastal California (Ventura and Los Angeles Cos.), 480-595 km away; and one WEGR released off south coastal California (Orange Co.) and recovered four mo later in the San Francisco Bay area, approximately 625 km away.

Movements of rehabilitated birds relative to capture location. There were 17 rehabilitated birds that had readily available digitized data on collection, release, and recovery location, and for which all locations were within the nonbreeding range. For the

Table 1. Between-year band encounters of *Aechmophorus* greebes banded in the nonbreeding season and recovered in a subsequent nonbreeding period, summarized from data provided by the U.S. Bird Banding Lab for 1934-2011. Encounters that suggest lack of site fidelity are indicated with an asterisk (*).

Species[1]	Banding/Release Location	Encounter Location	No. of Recoveries	Timing of Encounter
WEGR	San Francisco Bay, CA	North coastal CA *	1	1 year later
WEGR	San Francisco Bay, CA	San Francisco Bay Area, CA	4	3, 5, 6 and 8 years later
WEGR	San Francisco Bay, CA	Monterey Bay Area, CA*	2	1 and 2 years later
WEGR	San Francisco Bay, CA	South coastal (Santa Barbara Co.) CA*	1	1 year later (carcass potentially old)
WEGR	South coastal (L.A. Co.) CA	Monterey Bay Area, CA*	1	2 years later (carcass potentially old)
WEGR	South coastal (L.A. Co.) CA	South coastal (Santa Barbara Co.) CA	1	1 year later
WEGR	South coastal (L.A./Ventura Cos.) CA	South coastal (L.A./Ventura Cos.) CA	6	1 (n=2), 2 (n=3), and 5 (n=1) years later
WEGR	South coastal (L.A. Co.) CA	South coastal (Orange/San Diego Cos.) CA	1	1.5 years later
WCGR	San Francisco Bay, CA	South Coastal WA*	1	2 years later
WCGR	San Francisco Bay, CA	San Francisco Bay Area, CA	1	1 year later
CLGR	San Francisco Bay Area, CA	San Francisco Bay Area, CA	2	1 and 2 years later
CLGR	South coastal (L.A. Co.) CA	South coastal (L.A. Co.), CA	1	1 year later
			Subtotal = 22	

[1] Because Western and Cark's grebes were lumped until 1985, individuals in the database as "Western Grebe" prior to then may have included some Clark's Grebes, so were reclassified post hoc by the authors as "WCGR" (Western/Clarks Grebe).

within-season encounters (n=12), slightly more birds (67%) moved in the direction of their capture location, with the remaining (33%) showing the opposite pattern (Table 2), although this difference was not significant ($X^2 1 = 0.69, P = 0.41$). The recovery location of some of these grebes that moved in the direction of their initial capture location was beyond or short of their capture location (Table 2). No evident pattern was observed for the between-year encounters (n=5), with little overlap for any individual among capture, release, and recovery locations (Table 2).

Encounters of previously oiled and rehabilitated birds. One-third (51 of 156, or 33%) of all encounters were of grebes banded just prior to release after being rehabilitated due to oiling. This included three CLGR, five WCGR, and 43 WEGR. Of these, there were six between-season recoveries, 2.5 mo to 1.5 yr after release (Table 3): one grebe released in the San Francisco Bay area was found dead the following summer in Saskatchewan, Canada; and five birds released off southern California were encountered in a subsequent year (one found dead the following summer in North Dakota; two found dead that same year in inland southern California during spring migration; one found dead due to an apparent fishing interaction at Clear Lake, CA, two summers later; and one captured in a pond in southwestern Wyoming the next year due to salt buildup and subsequently released). There were 11 between-year encounters of birds banded after rehabilitation from an oil spill (Table 3). This included three released in the San Francisco Bay area: one recovered dead one winter later in the same area; one recovered alive and injured five years later in the same area; and one recovered dead two winters later off coastal Washington. The eight remaining birds were initially released in southern coastal California, with all but one recovered in the same general region: two the following winter (one dead; one alive and re-oiled); four two winters later (one injured; three re-oiled and dead); and one five years later (dead). The eighth bird was recovered dead in Monterey Bay two years later.

Thirty-four oiled and rehabilitated grebes were encountered within the same season. Five WEGR were recovered alive but subsequently died or were

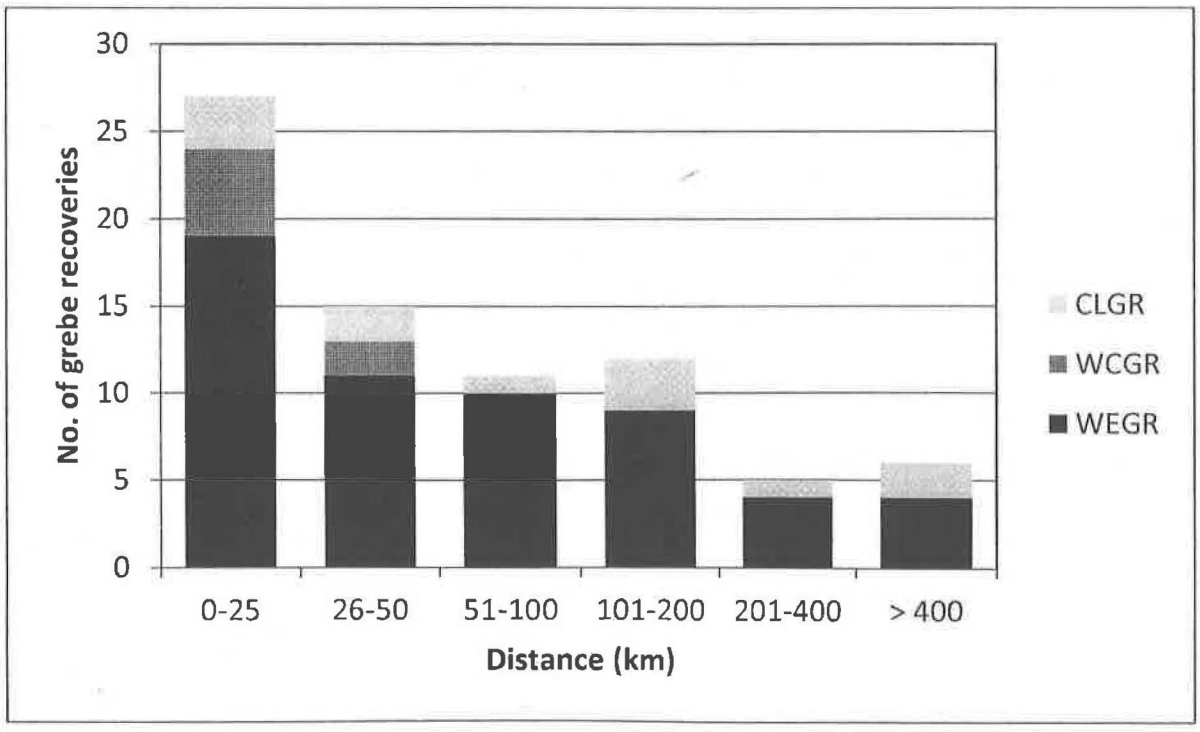

Figure 1. Distances of within -winter movements of Western and Clark's grebes based on band encounter data provided by the U. S. Bird Banding Lab for 1934-2011. Distances may be +/- 8-14km because of reporting precision (often by 10-minute block and not exact coordinates).

euthanized; one CLGR was recovered injured and later released; one WEGR was observed alive (the band read through a scope); one WEGR had an unreported fate; one WEGR and one WCGR were hit by cars; and the remaining (26 WEGR, one CLGR, one WCGR) were found dead. These within-season encounters were recovered one day to six mo from their release date, and the distance between release and recovery locations varied considerably (the furthest, southern California to the San Francisco Bay Area, approximately 625 km).

DISCUSSION

The band encounter data we examined suggests that *Aechmophorus* grebes are fairly plastic in their winter site fidelity, with some individuals moving considerable distances within the winter season or not returning to the same region to winter in subsequent years, and other encounters suggesting site fidelity. Oppel et al. (2008) found that King Eiders (*Somateria spectabilis*) did not show strong migratory connectivity or winter site faithfulness, and suggested that these two traits may be linked. Indeed our results suggest that migratory

Table 2. Movement of grebes within their nonbreeding range from release to recovery location in reference to original capture location. Predicted post-release movement is that bird returns to (or stays at) original capture location; actual movement is direction bird went in relation to its release location. O indicates lack of movement; arrows show the approximate cardinal direction of movement; double-arrows indicate movement in the same direction but further than predicted; and smaller arrows indicate movement in the predicted direction but not as far as predicted.

				Post-release Movement	
Species	Capture Location	Release Location	Encounter Location	Predicted	Actual
Within-winter movements					
WEGR	Astoria, OR.	San Francisco Bay region (Pt. Reyes)	Half Moon Bay	↑	↓
WEGR	Astoria, OR.	San Francisco Bay	Morro Bay	↑	↓
WEGR	San Francisco Bay area	San Francisco Bay	Monterey Bay	O	↓
WEGR	Half Moon Bay, CA.	San Francisco Bay region (Pt. Reyes)	Monterey Bay	↓	↓ ↓
WEGR	Santa Cruz, CA.	San Francisco Bay	Northern coastal CA (Humboldt area)	↓	↑
WEGR	Seaside, CA.	San Francisco Bay	Monterey Bay area	↓	↓
WEGR	Monterey, CA.	San Francisco Bay	San Luis Obispo Bay	↓	↓ ↓
WEGR	Point Lobos, CA.	San Francisco Bay region (Pt. Reyes)	Monterey Bay	↓	↓
WEGR	Oceano Dunes, CA.	San Francisco Bay	San Mateo Co. coast (Pescadero)	↓	↓
WEGR	Oceano Dunes, CA.	South coastal CA (Orange Co.)	San Francisco Bay	↑	↑ ↑
CLGR	Santa Cruz, CA.	San Francisco Bay region (Pt. Reyes)	San Mateo Co. coast (Pescadero)	↓	↓
CLGR	Ocean Dunes, CA.	San Francisco Bay	Morro Bay	↓	↓
Between-winter movements					
WEGR	Monterey, CA.	San Francisco Bay	Northern coastal CA (Humboldt area)	↓	↑
WEGR	Morro Strand, CA.	San Francisco Bay region (inland)	Santa Barbara area	↓	↓ ↓
WEGR	Santa Barbara, CA.	South coastal CA (Los Angeles Co.)	Monterey Bay	↑	↑ ↑
WEGR	Trona, CA.	South coastal CA (Los Angeles Co.)	South coastal CA (Orange Co.)	↗	O
CLGR	San Luis Obispo, CA.	San Francisco Bay	San Mateo Co. coast (Ano Nuevo)	↓	↓

Table 3. Between-season and between-year encounters of birds banded following rehabilitation for oiling (34 within-winter encounters are not shown), summarized from data provided by the U.S. Bird Banding Lab for 1934-2011. Release location is not always in the same region as original capture location; capture locations listed as unknown could not be determined due to a lack of digitized capture records.

Species[1]	Banding Date	Recovery Date	Capture Location	Release Location	Recovery Location
Between-season recoveries					
WEGR	17 May 2006	7 Aug 2006	S. Coastal CA	S. coastal CA	N. Dakota
WEGR	28 Mar 2007	3 Oct 2007	Unk.	S. coastal CA	S. Calif. (inland)
WEGR	18 Mar 2008	28 Jun 2008	Unk.	S. coastal CA	S. Calif. (inland)
WEGR	13 Feb 2009	21 Apr 2010	Unk.	S. coastal CA	Wyoming
WCGR	18 Jan 1980	23 Jun 1980	Unk.	San Fran. Bay Area	Saskatchewan
CLGR	4 Dec 2007	6 Jun 2009	Unk.	S coastal CA	Clear Lake, CA
Between-year recoveries					
WEGR	30 Mar 2002	9 Apr 2007	Unk.	San Fran. Bay area	San Fran. Bay area
WEGR	2 Jan 2003	18 Jan 2005	Unk.	S. coastal CA	S. coastal CA
WEGR	21 Jan 2005	1 Mar 2007	S. coastal CA	S. coastal CA	S. coastal CA
WEGR	23 Jan 2005	Mar 2007 [2]	S. coastal CA	S. coastal CA	S. coastal CA
WEGR	3 Feb 2005	Mar 2007 [2]	S. coastal CA	S. coastal CA	S. coastal CA
WEGR	26 Feb 2005	29 Mar 2005	Unk.	S. coastal CA	S. coastal CA
WEGR	13 Oct 2005	12 Feb 2007	Unk.	S. coastal CA	S. coastal CA
WEGR	7 Apr 2008	25 Apr 2010	S. coastal CA	S. coastal CA	Monterey Bay CA
WEGR	17 Apr 2009	16 Feb 2010	Unk.	S. coastal CA	S. coastal CA
WCGR	9 Apr 1971	26 Jan 1973	San Fran. Bay area	San Fran. Bay area	coastal WA
WCGR	18 Apr 1971	12 Mar 1972	San Fran. Bay area	San Fran. Bay area	San Fran. Bay area

[1] Because Western and Clark's grebes were lumped until 1985, individuals in the database as "Western Grebe" prior to then may have included some Clark's Grebes, so were reclassified post hoc by the authors as "WCGR" (Western/Clark's Grebe).
[2] No precise day of the month provided.

connectivity between breeding and wintering sites in *Aechmophorus* grebes is unlikely to be very strong given that many individuals are not returning to the same region year after year or remaining within the same region for the duration of the nonbreeding season, although more grebes showed site faithfulness than not. Similar variation among individuals in site faithfulness has also been found in other seabirds (Dias et al. 2011). Although we cannot rule out a pattern found in some passerines, that individuals could have multiple discrete wintering locations that they use within a season (Heckscher et al. 2011, Cormier et al. 2013) to which they may remain faithful from year to year, band encounter data for beachcast species cannot detect such patterns. Recent changes to the wintering distribution of Western Grebes, indicating a shift southward, also support this concept of plasticity in wintering locations given changing environmental conditions (Wilson et al. 2013).

The majority of nonbreeding grebes were banded as a result of rehabilitation, with birds treated for a number of ailments including oiling. Although within-season mortality was observed for some rehabilitated oiled birds, others whose bands were recovered lived for years post-rehabilitation, including one recovery five years later. We did not conduct a Mark-Recapture analysis with these data to assess survival, and it is not appropriate to interpret these recovery data as a reflection of survival rates; an assessment of survival

based on band encounter data for oiled Western and Clark's grebes and other seabird species in California is currently underway (Julie Skoglund, International Bird Rescue, pers. comm.).

One challenge in interpreting these movement data is that for rehabilitated birds, banding location represents release location and not necessarily capture location; therefore, some apparent within-season or between-year movements for rehabilitated birds may simply be grebes returning to their previous wintering locale if different from their release site. In the small sample of encounters for which we were able to evaluate this, we observed high variability in recovery location with respect to both release and initial capture location, further emphasizing the plasticity in grebe winter movements. Although that dataset revealed birds to frequently be released in a different region than where captured, birds are also frequently released within their capture region; thus, the overall movement patterns observed are not merely responses of birds released in novel regions. We also do not know the length of time or distance between mortality or debilitation and beachcast recovery, although suspect these are minimal. We were unable to test if movement patterns in post-rehabilitated grebes are comparable to patterns in undisturbed grebes, as nearly all recoveries were of post-rehabilitated grebes. Finally, for grebes that either showed or lacked apparent site fidelity between winters, it is unknown if these individuals actually migrated to their breeding grounds in the summer(s) between banding and recovery, or remained in their wintering range since their release. In California, there are often nonbreeding grebes present in coastal areas during the breeding season (pers. obs.).

Despite the limitations of using band encounter data of beachcast birds to examine movement patterns, and the need to be cautious about applying the results to *Aechmophorus* grebes not impacted by oiling or other debilitating events, such data provide valuable insights into Western and Clark's grebe movements that are not otherwise available. Recent technological advances (e.g., satellite or geolocator tags) will likely reveal additional and more precise insight into such movement patterns in grebes (K. Mills, pers. comm.). However, for species whose beachcast frequency produces relatively high band encounter rates, traditional banding and encounter data remain an often untapped and useful source of movement data. The plasticity observed in the winter site fidelity and persistence of *Aechmophorus* grebes likely reflects the highly variable marine environment in which they occur. Such a plasticity has been observed in other components of Western and Clark's grebe natural history, including breeding phenology and molt (Humple et al. 2013), and may increase their ability to respond to changing environmental and climatic conditions.

ACKNOWLEDGMENTS

We are grateful to the North American Bird Banding Program, including Danny Bystrak and other staff at the USGS Bird Banding Laboratory, for tracking and sharing banding and encounter data and supporting banding efforts; to staff and volunteers of International Bird Rescue for their rehabilitation and banding efforts; to Michelle Bellizzi for providing original recovery data for some of International Bird Rescue's bandings; to the Oiled Wildlife Care Network and California Department of Fish and Wildlife's Office of Spill Prevention and Response for their oil spill response efforts in California; to grebe banders and encounter reporters for sharing and reporting their data and observations; to Derek Girman for advice and support; to the Western Bird Banding Association for a research grant; and to Renée Cormier, Kyra Mills, Dan

LITERATURE CITED

Cormier, R.L., D.L. Humple, T. Gardali and N. Seavy. 2013. Light-level geolocators reveal strong migratory connectivity and within winter movements for a coastal California Swainson's Thrush population. *Auk* 130:283-290.

Dias, M.P., J.P. Granadeiro, R.A. Phillips, H. Alonso and P. Catry. 2011. Breaking the routine: individual Cory's shearwaters shift winter destinations between hemispheres and across ocean basins. *Proceedings of the Royal Society Biological Sciences* 278:1786-1793.

Eichhorst, B.A. 1992. An analysis of Western Grebe banding and recovery data. *North American Bird Bander* 17:108-115.

Heckscher, C.M., S.M. Taylor, J.W. Fox and V. Afanasyev. 2011. Veery (*Catharus fuscescens*) wintering locations, migratory connectivity, and a revision of its winter range using geolocator technology. *Auk* 128:531-542.

Humple, D.L. 2009. Genetic structure and demographic impacts of oil spills in Western and Clark's grebes. MS thesis, Sonoma State University, Rohnert Park, CA.

Humple, D.L., H.M. Nevins and L.A. Henkel. 2013. Revisiting winter wing molt in Western Grebes (*Aechmophorus occidentalis*) and Clark's Grebes (*A. clarkii*). *Waterbirds* 36:426-431.

Merkel, F.R., A. Mosbech, C. Sonne, A. Flagstad, K. Falk and S.E. Jamieson. 2006. Local movements, home ranges and body condition of Common Eiders *Somateria mollissima* wintering in southwest Greenland. *Ardea* 94:639-650.

Oppel, S., A.N. Powell and D.L. Dickson. 2008. Timing and distance of King Eider migration and winter movements. *Condor* 110:296-305.

R Development Core Team. 2011. The R project for statistical computing, v. 2.13.0. R Foundation for Statistical Computing, Vienna, Austria. http://www.R-project.org/.

Robertson, G.J. and F. Cooke. 1999. Winter philopatry in migratory waterfowl. *Auk* 116:20-34.

Robison, K.M. 2012. A multi-year analysis of brood size and phenology in Western and Clark's grebes (*Aechmophorus occidentalis* and *A. clarkii*) at two northern California lakes. MS Thesis, University of California, Davis, CA.

Storer, R.W. and G.L. Nuechterlein. 1992. Western Grebe (*Aechmophorus occidentalis*) and Clark's Grebe (*A. clarkia*). *In*: Poole, A. & Gill, F. (Eds.) The birds of North America, no. 26. Philadelphia & Washington, DC: Academy of Natural Sciences & American Ornithologists' Union.

Wilson, S., E.M. Anderson, A.S.G. Wilson, D.F. Bertram, and P. Arcese. 2013. Citizen science reveals an extensive shift in the winter distribution of migratory Western Grebes.

News, Notes, Comments

Errata: *NABB* Oct-Dec 2013 Vol. 38, No. 4, page 148, 1st column, 3rd Confer literature citation J. L. Larken, should be J. L. Larkin.

BANDING PERMITS, A NEW PARADIGM?

Changes and rumors of change at the Bird Banding Lab (BBL) have been an almost continuous part of banding in my more than 50 years of being a bander. Recently, it seems that increasing number of stories have come to light about permits not being issued to qualified people; such stories are troubling to many folks. Of course, the increase of these stories may be due to our increasingly efficient electronic communication modes.

In a recent note from the BBL to bird banders, it states: "Despite rumors to the contrary, the BBL continues to issue new master permits and subpermits on a regular basis." While this is true, some folks certainly have had permit applications rejected. Information on these rejections has come from a few people, perhaps a dozen in all, via the Ornithological Council and the North American Banding Council, both with representatives from all the ornithological organizations in North America. For a comment on this topic, search for "Could the days of free bird bands be coming to an end?" by Ellen Paul at ornithologyexchange.org.

On this subject, I would like to highly recommend that everyone interested in the permitting process read two very important documents: the Federal Advisory Committee's (FAC) report (Haseltine et al. 2008), and the BBL's more recent response to the 58 specific management recommendations in the FAC in Smith (2013). Specifically, as regards to permits, one of the responses indicated that the BBL is supporting "banding programs of scientists and managers while placing less emphasis on new "high-volume" banding operations that have limited scientific potential." But, even this direct response does not seem to clarify at least some of the nuances of the permit issuance question.

I propose to address two topics here: Is denial of permits a substantive issue and is denial always appropriate?