



United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay National Wildlife Refuge Complex
1 Marshlands Road, Fremont, CA 94555



July 11, 2018

Deanna Lynch
U.S. Fish and Wildlife Service
Washington Fish and Wildlife Office
510 Desmond Drive, Suite 102
Lacey, WA 98503

RE: DIP Tufted Puffin

Dear Deanna,

This response concerns the request for information on Tufted Puffins for the Service's Species Status Assessment. Information being provided concerns information we have in or records and my professional knowledge of the species in the State of California, particularly on the Farallon Islands National Wildlife Refuge where the largest colony in the state occurs. The Farallon Islands NWR is managed under the San Francisco Bay National Wildlife Refuge Complex. Note that the name of the refuge was recently changed from Farallon to Farallon Islands NWR.

For information on Tufted Puffins in California, I have listed the most relevant literature below. Literature in my files electronically I will provide separately via Google Drive or hard copy, including recent Farallon seabird reports.

I have extensive background in surveying seabirds in California, including being a member of the last statewide California seabird colony survey, various other surveys, and managing the Farallon Islands NWR. From my extensive knowledge from these surveys and papers I have published, Tufted Puffins were clearly a more common and widespread species in the late 19th and early 20th centuries than today. In the past, the species was considered "common" on some of the California Channel Islands where they no longer exist. They once numbered in the low thousands on the South Farallon Islands, where since the early 1970s numbers have ranged more in the range of 50-300 breeding birds. Available information suggests a major decline sometime between the early and mid-20th centuries. Since the first statewide survey of California seabird colonies in 1975-1980 (Sowls et al. 1980) and re-survey in 1989-1991 (Carter et al. 1992), many of the few remaining colonies appear to have been lost while the Farallon colony has increased somewhat. However, most sites lack data, and more comprehensive and detailed surveys are needed to properly assess the true status of the species in California.

Tufted Puffins on the Farallon Islands NWR are only known to nest on the South Farallon Islands, which are the main islands. On the Farallones, puffins nest in rock crevices mostly on steep, mostly inaccessible cliffs. Historical observations, when puffins were more abundant,

recorded them also nesting in soil burrows. Map 11.3 in Ainley and Boekelheide (1990a) still provides a good representation of current breeding distribution on the islands. Because puffins nest in mainly inaccessible areas or those closed to regular visitation, monitoring is very difficult and has been limited to annual surveys of the numbers of active breeding sites. Besides approximate breeding population size, we know very little of Tufted Puffin ecology on the Farallones. Regarding their decline from historical numbers, Ainley and Lewis (1974) and Ainley et al. (1990a) surmised that extensive oil pollution, competition for nest sites on the Farallones with introduced European hares, and possibly the decline of the Pacific sardine in the mid-20th century were the likely causes. European hares were eradicated from the Farallones in 1974. The moderate increase in numbers of breeding puffins on the islands since the early 1970s is probably at least partially due to the hares' eradication. Partial recovery of the sardine stock has not resulted in a large increase in puffins. In conversations I have had over the years with Dr. David Ainley, he has stated that he no longer believes the decline of the sardine was a factor in the puffin decline because since their partial recovery sardines have not become a major seabird diet item, possibly because they too large of a prey item.

Besides the eradication of European hares in 1974, management for Tufted Puffins on the Farallon Islands is done in alignment with overall management of the Refuge (see the Farallon NWR CCP; USFWS 2009). This includes closure of the Refuge to the public to protect these sensitive resources, access to wilderness areas is limited to the fall and winter months (outside the seabird breeding season), and most portions where puffins nest on the main island of Southeast Farallon (location of field station) are closed to regular access.

Aside from the Farallones, Tufted Puffins appear to be in continued decline but little recent data are available from most historic colonies. McChesney et al. (2013) surveyed seabird colonies on the north central coast of California between Point Arena and Pigeon Point in 2010-2012 and did not detect any Tufted Puffins away from the South Farallon Islands. The Common Murre Restoration Project, which I have managed since late 2002, has conducted nearly annual, intensive monitoring of seabirds at Point Reyes since 1996. Small numbers of puffins were known to nest on the Point Reyes Headlands until at least 1989 (Carter et al. 1992). However, I have never seen a puffin at Point Reyes and I am aware of only one brief sighting of a puffin in flight by one of my biologists several years ago (2006 or 2007). We have also been monitoring seabirds at another historic puffin colony at Hurricane Point Rocks, Monterey County, since 1996. I am unaware of any puffins being observed by any of our biologists there.

Several years ago, I heard of anecdotal reports from birders in Humboldt County, California, that puffin colonies in the Trinidad area had declined or disappeared. Up until at least 1989, puffins nested on rocks near Trinidad Head, with Green Rock being the largest (Sowls et al. 1980, Carter et al. 1992). I recall from surveys we conducted in 1989 that puffins could be seen on almost any morning on Green Rock and often on Puffin Rock (see Carter et al. 1992). Following up on these reports, I asked biologists working for me on a project studying the decline of Common Murres on Redding Rock, Humboldt County in 2010 to watch for puffins in the Trinidad area. They conducted frequent boat trips from Trinidad Harbor to Redding Rock, and en route went past several of the rocks with historic puffin colonies including Green and Puffin rocks. They especially would check Green Rock. From my recollections, only once did they see a puffin as it flew past Patrick's Point, near the historic colonies but not on a colony.

On one of the field trips I made for the Redding Rock work on 8 June 2009, we conducted a boat survey in search of puffins at both Green and Puffin rocks. From my field notes, Green Rock was surveyed at both 0830 h and 1330 h, while Puffin Rock was surveyed only at 1330 h. No puffins were seen. On 9 June 2009 between 0725 and 0815 h, myself and four others conducted a survey of Green and Puffin rocks from Elk Head on the nearby mainland (the best vantage point to view these rocks) in search of puffins. None were seen. From these observations, it appeared to me that puffins were not nesting on their historic colonies in the Trinidad area.

Aside from the Farallon Islands, the only other active colony in California that I am certain of is Castle Rock (Castle Rock NWR), although I am unaware of any surveys of them since 1997-1999 (Jaques and Strong 2001). While assisting with a project at Castle Rock in late summer nearly 10 years, I recall seeing at least two Tufted Puffins visiting Castle Rock, including one that delivered a bill-load of fish to a burrow. Unfortunately, I don't have any field notes containing the date of that observation. For more information on puffins at Castle Rock, contact Castle Rock Refuge manager Eric T. Nelson.

For the Farallon Islands, we do have GIS shapefiles for the South Farallon Islands but do not have any layers for Tufted Puffin distribution or nesting sites. However, if you are interested in obtaining GIS data for the islands, please let me know and I can get them provided to you.

If you have any questions, please contact me at (510) 792-0222 ext. 222 or gerry_mcchesney@fws.gov.

Sincerely,



Gerry McChesney

Manager, Farallon Islands National Wildlife Refuge and
Common Murre Restoration Project

cc: Anne Morkill, Chris Barr, Eric T. Nelson

Most relevant literature on Tufted Puffins in California (also see references within):

Ainley, D. G., and Lewis, T. J. 1974. The history of Farallon Island marine bird populations, 1854–1972. *Condor* 76:432–446.

Ainley, D. G., Morrell, S. H., and Boekelheide, R. J. 1990a. Rhinoceros Auklet and Tufted Puffin, in *Seabirds of the Farallon Islands: Ecology, Dynamics, and Structure in an Upwelling-System Community* (D. G. Ainley and R. J. Boekelheide, eds.), pp. 339–348. Stanford Univ. Press, Stanford, CA.

Ainley, D. G., Strong, C. S., Penniman, T. M., and R. J. Boekelheide. 1990b. The feeding ecology of Farallon seabirds, in *Seabirds of the Farallon Islands: Ecology, Dynamics, and*

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- Briggs, K. T., Tyler, W. B., Lewis, D. B., and Carlson, D. R. 1987. Bird communities at sea off California: 1975 to 1983. *Studies in Avian Biology*. 11.
- Carter, H. R., McChesney, G. J., Jaques, D. L., Strong, C. S., Parker, M. W., Takekawa, J. E., Jory, D. L., and Whitworth, D. L. 1992. Breeding populations of seabirds in California, 1989–1991. Unpublished report, U.S. Fish & Wildl. Serv., Dixon, CA.
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- Jaques, D., and Strong, C. S. 2001. Seabird status at Castle Rock National Wildlife Refuge, 1997–1999. Unpublished report, Crescent Coastal Research, Astoria, OR. Available from Pacific Eco Logic, 375 Third St., Astoria, OR 97103.
- McChesney, G.J. and H.R. Carter. 2008. Tufted Puffin (*Fratercula cirrhata*). In (Shuford, W. D., and Gardali, T., editors). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. *Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- McChesney, G. J., Carter, H. R., and Whitworth, D. L. 1995. Reoccupation and extension of southern breeding limits of Tufted Puffins and Rhinoceros Auklets in California. *Colonial Waterbirds* 18:79–90. (I will mail a hard copy reprint)
- McChesney, G.J., H.R. Carter, C.A. Bechaver, S.J. Rhoades, R.W. Bradley, P.M. Warzybok, R.T. Golightly, and P.J. Capitolo. 2013. Seabird breeding population sizes within the North Central Coast Study Region of the California Marine Life Protection Act Initiative, 2010–2012. Pages 78–110 in (G.J. McChesney and D. Robinette, Eds.), *Baseline characterization of newly established marine protected areas within the North Central California Study Region - seabird colony and foraging studies*. Unpublished report, U.S. Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex, Fremont, California, and Point Blue Conservation Science, Petaluma, California.
- Osborne, T. O. 1972. Ecology and avian use of the coastal rocks of northern California. M.A. thesis, Humboldt State Univ., Arcata, CA.
- Point Blue Conservation Science. Farallon annual seabird reports.
- U.S. Fish and Wildlife Service. 2009. Farallon National Wildlife Refuge Final Comprehensive Plan. U.S. Fish and Wildlife Service, SF Bay NWR Complex, Newark, CA.