

The Birds of Piper Slough, Contra Costa County -- Part 1 (loons through terns)

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Piper Slough, Contra Costa County, has long been a favorite spring birding site for bay area birders in search of chats, grosbeaks, and other Central Valley birds. Only recently, however, has the area been thoroughly studied at other seasons. These efforts have resulted in a list of nearly 200 species, 50 of these confirmed as breeding. This paper discusses the recent status of loons through terns at Piper Slough. A subsequent paper will discuss the status of the remainder of the bird species (doves through passerines) at this site.

Piper Slough forms the northeastern border of Bethel Island (Figure 1), well within the great inland delta of the Sacramento and San Joaquin rivers. The name Piper Slough has actually become a bit of a misnomer, however, as a result of levee failure surrounding Little Frank's Tract during the heavy floods the early 1980s. Little Frank's Tract, formerly a reclaimed island just north of Piper Slough, was flooded for the most part and remains flooded today. Most of the former northern boundary of Piper Slough is identifiable only by the rip-rap that still protrudes from the water at scattered locations, forming a vague outline of the former levee around Little Frank's Tract.

The prime habitat for landbirds, and thus the primary focus for birders, is on the base of the south side of the levee at Bethel Island's north end, where a swath of willows and brambles runs west from the end of Bethel Island Road. This swath varies from perhaps fifty yards at it's widest to just a few yards at it's narrowest, with several gaps containing little but weeds and blackberry brambles. As the levee heads west, it soon turns south and then fairly quickly back to the north again, forming a small inlet shaped something like a distorted "u." The willows abruptly end at the western end of this inlet, less than a mile from Bethel Island Road.

The levee itself, like most of the delta, is lined with rip-rap, with any weed daring to raise it's head quickly yanked away. In recent years, construction began on the levee to widen it at the base, thus giving it a less severe slope on the island side. Of course, this couldn't be done without first bulldozing some of the riparian strip and the result was the loss of approximately 5-10 yards of willow habitat along its entire length. This has probably had a negative affect on several species, particularly rails and Spotted Towhees.

The open water to the northeast (Piper Slough and the flooded Little Frank's Tract) has yielded the vast majority of the records of waterbirds, and basically all of the records of loons, grebes, and diving ducks. Only recently has this area been checked thoroughly on a regular basis, which explains why many of these records show recent dates.

To the north of Little Frank's Tract are Bradford Island and Webb Tract, two lightly populated agriculturalized islands that attract large numbers of ducks,

geese, and cranes during the winter months. These birds can be viewed with a spotting scope from the Bethel Island levee when in flight.

The entire study area, then, includes the length of the levee from the north end of Bethel Island Road west to the end of riparian vegetation, all open water visible from the levee, the airspace over Bradford Island and Webb Tract, the fields to the south as far as the large willow clump on the west side of the road about halfway to the intersection with Harbor Road, and the area around the first house on the east side of Bethel Island Road at its north end. The house is included because birds are inevitably counted there at the start of every trip, but the ensuing neighborhood to the east has never been surveyed. These limits exclude a seasonal pond at the intersection of Bethel Island Road and Harbor Road.

The following species accounts originate primarily from data compiled by the author during 140+ trips to the area from 1991 through the summer of 2000 (with most trips made from 1995-2000). The accounts have been bolstered by additional records selected from published sources, primarily from *The Quail*, the monthly newsletter of the Mt. Diablo Audubon Society. All sightings are those of the author except where specifically noted.

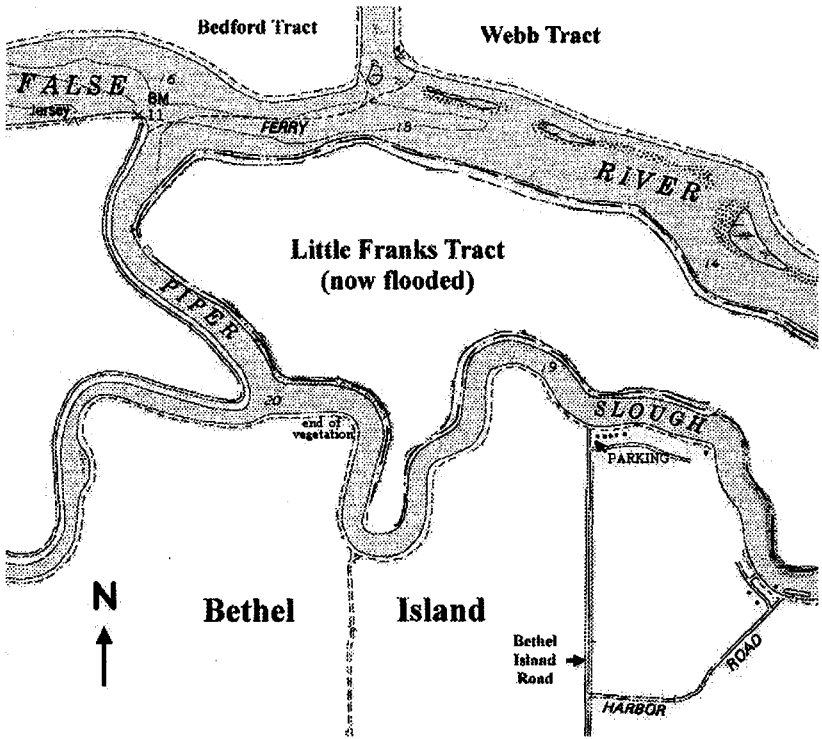


Figure 1. Map of Piper Slough, Little Frank's Tract, and the northern end of Bethel Island.

Species Accounts

Red-throated Loon (*Gavia stellata*) -- Possibly the same bird was recorded in four consecutive winters: 2/14/95, 1/26-2/7/96, 1/18/97, 2/9/98. Note the tiny span of dates.

Pacific Loon (*Gavia pacifica*) -- The one record is of two birds together, 2/7/96.

Pied-billed Grebe (*Podilymbus podiceps*) -- Common transient and winter visitor, rare in summer. They typically begin to arrive in mid- to late August with most departing by mid-April. High counts are generally in November (high of 59 on 11/25/98) and Feb (high of 135 on 2/3/99). The only record that indicates possible nesting is of two birds present 6/3/99.

Horned Grebe (*Podiceps auritus*) -- Rare winter visitor, recorded on just three occasions: 1/11-26/96, 3/12/98, and 2/4/2000.

Eared Grebe (*Podiceps nigricollis*) -- Rare winter visitor, recorded on just four occasions: 3/15/97, 11/25/98, 2/3/99 (2), and 2/4/2000 (3).

Western Grebe (*Aechmophorus occidentalis*) -- Uncommon spring migrant, noted between 2/3 and 3/27, with a high count of four on 2/3/99 and 2/4/2000. Note that three *Aechmophorus* sp. were recorded 4/2/98.

Clark's Grebe (*Aechmophorus clarkii*) -- Uncommon spring migrant, noted on only five occasions: 3/29/95 (2), 2/9/98 (2), 3/25/99, 4/16/99, and 2/4/2000.

American White Pelican (*Pelecanus erythrorhynchos*) -- A rare transient, recorded on but four occasions: 11/23/80, 1/25/95 (2), 5/25/96 (3), and 9/3/99 (18). It is unclear to me why this species has been recorded here so seldom.

Double-crested Cormorant (*Phalacrocorax auritus*) -- Present in varying numbers throughout the year but movements appear complex with high numbers recorded in August (e.g. 120+ on 8/20/97), November (e.g. 110 on 11/6/997) and February-March (e.g. 209 on 2/3/99 and 130 on 3/4/99).

American Bittern (*Botaurus lentiginosus*) -- Of 10 records, three are from May, four are mid-October to mid-November, one is from January and one is from March. The tenth record is the only breeding record: one bird just out of the nest on 6/11/94.

Great Blue Heron (*Ardea herodias*) -- Present in small numbers, usually 1-3, throughout the year.

Great Egret (*Ardea alba*) -- Present in small numbers, usually 1-3, throughout the year.

Snowy Egret (*Egretta thula*) -- Uncommon fall visitor, recorded 8/30 to 11/25 with a high count of four on several occasions. The only non-fall record is of three on 5/30/96.

Cattle Egret (*Bubulbus ibis*) -- Rare migrant: One on 4/27/96 (K. Hints, J. Lomax) and two on 9/1/98.

Green Heron (*Butorides virescens*) -- Uncommon summer resident with two pairs breeding annually. Spring migrants usually seem to appear about 3/12 with birds present through early September, although it is unclear how many birds in August-Sept. are local breeders or migrants. The sole winter date is 2/14/95.

Black-crowned Night-Heron (*Nycticorax nycticorax*) -- Six records with four from spring (2/14-4/30) and two from fall (9/1 and 10/12).

White-faced Ibis (*Plegadis chihi*) -- Eight records from throughout the year, with a high of 70 on 4/2/98. Thirty-four birds on 6/1/2000 (as well as flocks at nearby locations in June) strongly suggests that breeding is now taking place somewhere in the vicinity.

Turkey Vulture (*Cathartes aura*) -- Small numbers are present throughout the year with a high of just 14 on 9/1/98.

Tundra Swan (*Cygnus columbianus*) -- Noted regularly in winter over Webb Tract to the north with dates spanning 11/8 through 2/9 and a high of 150+ on 2/9/98.

Greater White-fronted Goose (*Anser albifrons*) -- The most common goose, they are most often noted over Webb Tract. Dates span only 1/11 through 3/29, which is probably due to the timing of flooding on Webb Tract. The high count was 12,000 on 1/26/96.

Snow Goose (*Chen caerulescens*) -- Dates span 1/11-3/4 and like Greater White-fronted Goose the late arrival date is probably a reflection of suitable habitat on Webb Tract. A high count of an estimated 40,000 flew southeast from Webb Tract at dawn on 2/14/95. The lone record of a Blue Goose is for 1/25/95.

Ross's Goose (*Chen rossii*) -- Recorded on just 5 occasions but this is almost certainly an artifact of the distance from which flocks of "white" geese are normally viewed. Dates span only 1/11-2/4 and the high is just seven (2/4/2000), but the sizes of some of the flocks of white geese suggests that thousands must be present on occasion.

Canada Goose (*Branta canadensis*) -- Recorded on just four occasions with a high of just five. Three of the records have come from March. At least three of the records pertained to very large birds, indicating members of the still-increasing breeding population in the region.

Wood Duck (*Aix sponsa*) -- The only recent record is of four on 9/26/96 although local residents have offered anecdotal accounts of their abundance in the past, especially before the failure of the levee around Little Frank's Tract.

Green-winged Teal (*Anas crecca*) -- One record: Two on 2/3/96.

Mallard (*Anas platyrhynchos*) -- A fairly common resident with small numbers present throughout the year and an uncommon breeder. Flocks of migrants have been seen on several occasions in early September with a high of 575 on 9/6/98.

Northern Pintail (*Anas acuta*) -- Like other dabblers, pintails are rarely recorded on the open waters of Piper Slough. Four late-winter records are squeezed between 1/25 and 2/9. There is only one other record, of 310 heading south on 10/12/98.

Cinnamon Teal (*Anas cyanoptera*) -- Although fairly common at other areas on Bethel Is., they have been recorded on just four occasions: 10/31, 2/14, 3/29 and 4/20.

Northern Shoveler (*Anas clypeata*) -- Rarely recorded on the open slough but apparently common on Webb Tract and thus visible when the flocks there are flushed.

Gadwall (*Anas strepera*) -- Very uncommon on the open slough with most records late-winter through spring. Breeds elsewhere on Bethel Is.

American Wigeon (*Anas americana*) -- Uncommon on the open slough, mostly in February, with a high of 65 on 2/4/2000. Likely present in much larger numbers on Webb Tract in winter.

Greater Scaup (*Aythya marila*) -- Definitely recorded on two occasions: three on 2/14/95 and five on 2/4/2000.

Lesser Scaup (*Aythya affinis*) -- Definitely recorded 2/4/2000 (12 birds). Unidentified scaup have been noted on six occasions, 2/3-4/16, with a high of 50 on 3/4/99.

Common Goldeneye (*Bucephala clangula*) -- Recorded in small numbers on the open slough 1/11 to 3/4 with a high of 18 on 2/4/2000.

Bufflehead (*Bucephala albeola*) -- Very uncommon winter visitor on the open slough, recorded 10/11-2/4 with a high of eight on 11/25/98.

Red-breasted Merganser (*Mergus serrator*) -- Rare winter visitor. A pair was present 2/9-3/12/98 and a single female was present 2/4/2000.

Ruddy Duck (*Oxyura jamaicensis*) -- Our most common diving duck although they are sometimes absent, even in mid-winter. Records span 11/25 through 6/1, with a high of 350 on 2/3/99. The 6/1 record involved a pair, indicating that breeding may occur here, at least on occasion.

Osprey (*Pandion haliaetus*) -- Very uncommon migrant. Spring migrants have been noted on six occasions between 3/4 and 6/5, fall migrants on three occasions 8/25-9/24.

White-tailed Kite (*Elanus leucurus*) -- Uncommon resident, nesting within the study area on occasion but always found somewhere in the nearby vicinity.

Northern Harrier (*Circus cyaneus*) -- Fairly common resident, with a pair nesting annually. Numbers are bolstered in the winter by migrants from the north.

Sharp-shinned Hawk (*Accipiter striatus*) -- A rare migrant, recorded just three times: 4/22/98, 5/10/94, and 10/31/95.

Cooper's Hawk (*Accipiter cooperii*) -- Rare winter visitor and spring migrant with just three records: 1/12/96, 2/14/95, and 4/17/93.

Red-shouldered Hawk (*Buteo lineatus*) -- Rare fall migrant with four records falling between 8/20 and 9/26.

Swainson's Hawk (*Buteo swainsoni*) -- Fairly common migrant with spring birds noted 3/16 to 6/1 and fall birds noted 8/3 to 9/26. High count was 8+ on 3/29/95. As elsewhere, Swainson's Hawks have increased markedly in recent years in eastern Contra Costa County so it is of interest that the first record for Piper Slough did not come until 1994.

Red-tailed Hawk (*Buteo jamaicensis*) -- Although a few are present daily, Red-tails nest just outside of the study area.

Rough-legged Hawk (*Buteo lagopus*) -- The lone record is of a rather late bird 4/23/96 (F. Bennett, J. Richmond, et al).

Golden Eagle (*Aquila chrysaetos*) -- The lone record is of two spring migrants 4/2/98.

American Kestrel (*Falco sparverius*) -- For a bird that is so common and widespread, American Kestrels are recorded somewhat sporadically at Piper Slough. Although they are found throughout the year they do not breed at the slough proper and are missed at least every other trip.

Merlin (*Falco columbarius*) -- Rare winter visitor and spring migrant with just three records: 1/8/96, 3/29/95 and 4/30/94.

Peregrine Falcon (*Falco peregrinus*) -- Just one record: 2/14/95.

Ring-necked Pheasant (*Phasianus colchicus*) (I) -- A fairly common permanent resident of the fields and brambles in the south part of the study area with at least several pairs nesting annually.

California Quail (*Callipepla californica*) -- Rare and sporadic spring visitor with nine records spanning 3/29 through 6/19. Males have been detected either once or twice each of the past eight springs with the exception of 1999 yet females have never been noted and the males appear not to have lingered through the breeding season. Where these potential colonizers emanate from remains unclear.

Black Rail (*Laterallus jamaicensis*) -- First recorded 11/11/94, then found 2/7-4/28/96 and 3/25-6/11/97. In 1997 there were as many as three singing males. Presence into June in 1997 strongly suggests that breeding took place. In recent years the marsh has begun to become choked with willows and the rails have apparently departed.

Virginia Rail (*Rallus limicola*) Fairly common but possibly declining migrant and winter resident with dates spanning 8/29 to 6/2. Highs of 10-15 birds were recorded in the winters of 94-95 and 95-96 but in recent years high counts have been averaging closer to five birds. The 6/2/96 bird was anomalous, as the last spring migrants have never been noted later than 4/11 in other years.

Sora (*Porzana carolina*) -- Formerly fairly common winter resident with a narrower span of recorded dates (10/31-4/16) than Virginia Rail. High counts of 10 in the winter of 94-95 and seven in the winter of 95-96 were expected but one or none has become more typical in recent years. This decline is likely due to the same choking of the marsh that has resulted in the decline of both Black and Virginia Rails.

Common Moorhen (*Gallinula chloropus*) -- Very rare winter visitor and spring migrant with up to four birds present in the winters of 94-95 and 95-96 and a single bird noted 4/27/98.

American Coot (*Fulica americana*) -- Common, often abundant, migrant and winter resident. Small numbers typically begin to arrive in early September with higher numbers by the middle of the month (i.e. 900 on 9/17/98) through early November (high count of 1400 on 10/20/98). Numbers are usually, although not always, much decreased in mid-winter with large numbers again present in early February (1300 on 2/9/98) to as late as early May in some years.

Sandhill Crane (*Grus canadensis*) -- Rarely seen over Piper Slough proper but regular in winter at Webb Tract to the north where they may be seen when in flight. Records span only 10/11 to 2/9 with a high of just 25.

Killdeer (*Charadrius vociferus*) -- Uncommon permanent resident, a couple of pairs nesting annually.

Black-necked Stilt (*Himantopus mexicanus*) -- Because no suitable habitat exists in the study area, Black-necked Stilts are very rarely recorded, with single records of fly-bys from March, April and early June. They nest immediately adjacent to the study area in wet years.

American Avocet (*Recurvirostra americana*) -- Status very similar to that of Black-necked Stilt with just 4 records from 9/14 through 3/29.

Greater Yellowlegs (*Tringa melanoleuca*) -- Rare winter visitor and spring migrant with three winter records in the period 11/11 to 1/11 and four spring records spanning the period 3/12 to 5/22. All were single fly-bys except one record of two birds.

Willet (*Catoptrophorus semipalmatus*) -- One record: 6/13/93.

Spotted Sandpiper (*Actitis macularia*) -- Just two records: 5/22/92 and 5/30-6/3/98.

Whimbrel (*Numenius phaeopus*) -- Rare migrant: 4/22/98 (1), 4/30/94 (8), 5/16/97 (55), and 10/12/95 (4).

Long-billed Curlew (*Numenius americanus*) -- Very rare fall migrant: 3 on 8/22/96 and 2 on 9/1/98.

Red Knot (*Calidris canutus*) -- A rare spring migrant, recorded once: 25 on 4/26/81 (B. Richmond).

Least Sandpiper (*Calidris minutilla*) -- Very rare migrant with just two records: One on 9/22/99 and three on 5/2/2000.

Dunlin (*Calidris alpina*) -- Rare in winter and spring, recorded twice: 35 on 2/4/2000 and 12 on 4/2/96.

Long-billed Dowitcher (*Limnodromus scolopaceus*) -- Just two records of late-winter fly-bys: 65 on 2/3/99 and 15 on 3/12/98.

Common Snipe (*Gallinago gallinago*) -- Rare spring migrant: One each on 3/29/97 and 4/16/99.

Bonaparte's Gull (*Larus philadelphia*) -- Rare migrant and winter visitor with just five records spanning 10/20 through 4/27. All records were of 1-6 birds except for a flock of 80 2/14/95.

Mew Gull (*Larus canus*) -- Rare winter visitor with just two records: one on 11/25/98 and four on 2/2/95.

Ring-billed Gull (*Larus delawarensis*) -- Surprisingly scarce with the few records being in spring and fall.

California Gull (*Larus californicus*) -- Far and away the most common gull at Piper Slough, California Gulls are present in modest numbers throughout the year, particularly in fall and spring. Large gull flocks are often noted in transit over Piper Slough and although not usually identified, they most likely are this species.

Herring Gull (*Larus argentatus*) -- Very uncommon visitor, chiefly late-winter through mid-April, with one to two birds sometimes present when there is a gull flock on the slough.

Thayer's Gull (*Larus thayeri*) -- Rare winter visitor occasionally noted among California Gull flocks.

Western Gull (*Larus occidentalis*) -- The lone record is of an adult present on 2/3/99.

Glaucous-winged Gull (*Larus glaucescens*) -- Rare migrant; one fall record for 9/14/94 and four spring records ranging from 3/12-4/11. All were single birds.

Caspian Tern (*Sterna caspia*) -- Common summer residents with the earliest spring arrival being 3/12/99 and the latest fall record being 9/13/99. High count was 40 5/14/97 but counts of 1-10 are more typical. The closest breeding colonies I am aware of are on San Francisco Bay.

Common Tern (*Sterna hirundo*) -- The lone record is of a single juvenile on 9/11/95.

Forster's Tern (*Sterna forsteri*) -- Fairly common resident. Small numbers, generally 1-4, are present mid-October through March with slightly higher numbers present mid-April and even into June (i.e. 35 on 5/20/2000). Numbers are again typically 1-4 until mid-August when adults return with fledglings (e.g. 8/15/99 when there were 25 adults and 8 very brown juveniles present). High numbers may still be present until as late as mid-October (e.g. 22 on 10/11/99).

Black Tern (*Chlidonias niger*) -- One record, of a single bird on 6/13/81 (B. Richmond).