WINTER STATUS OF THE SORA IN THE PACIFIC NORTHWEST

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In this note I attempt to clarify the winter range and population density of the Sora (*Porzana carolina*) in Oregon, Washington, and British Columbia by using data from Christmas Bird Counts (CBCs) and other sources. The Sora's principal winter range extends from the south Atlantic and Gulf states west through central Arizona and northern New Mexico to central California and south into South America. The species "occasionally occurs in winter north to extreme southern Canada and the northern United States" (A.O.U. 1983). Most Soras migrate out of the Pacific Northwest by September, although later migrants have been noted, e.g., as late as 8 November 1987, Malheur National Wildlife Refuge, Harney Co., Oregon (Littlefield and Cornely 1984). A late fall record from Washington is for 6 November 1980, Moses Lake, Grant Co. (Rogers 1981). Soras typically return to western Oregon, Washington, and British Columbia by early to mid-April, arriving on the coast a week earlier and east of the Cascades a week later than in the interior valleys (Cannings et al. 1987, Littlefield 1990, Littlefield and McLaury 1973, Paulson 1990, pers. obs.).

The first published winter record of a Sora in Oregon appears to be of the single bird reported on the 3 December 1956 Fort Klamath CBC; Gabrielson and Jewett (1940) cited no winter record of the Sora for the state. Eltzroth (1987) listed the Sora as a permanent resident, meaning that "some birds remain year round," but provided no details owing to the format of the publication. Soras have been known to winter in small numbers in western Washington since the early 20th century, with several records published by Jewett et al. (1953). The earliest published winter record of a Sora in British Columbia is of a bird collected at Chilliwack in the Fraser Valley on 6 December 1927 (Munro and Cowan 1947); this bird is now in the British Columbia Provincial Museum. The species is considered casual in winter in the Vancouver area, from which 16 of the province's 20 winter records come (Campbell et al. 1990) and where descriptions are still expected as documentation of winter sightings (Wayne Weber pers. comm.).

A report of "flocks" of Soras at the Klamath Basin National Wildlife Refuges on 7 February 1980 (Watson 1980) is difficult to evaluate. These birds were reported as migrants, but the location is suitable for wintering, and the species is known occasionally to form large flocks on favored wintering grounds (Ripley 1977). The date seems early for migrant birds even at such a southerly location, as the earliest spring migrant found at Malheur National Wildlife Refuge (a somewhat less temperate location) from 1956 to 1988 was on 4 April 1979 (Littlefield 1990). A bird found 7 March 1985 at Devil's Lake, Lincoln Co., Oregon (Heinl 1985), could have been wintering or an early migrant, as "some" Soras were reported there during the winter of 1984–85 (Phil Pickering, fide M. S. Eltzroth). Likewise, birds found on the Oregon coast 11 March 1984 (Geoff Keller) and in the Willamette Valley 18 March 1990 (Alan McGie, both fide M. S. Eltzroth) could have been winterers or migrants.

The great majority of published reports of winter Soras in the Pacific Northwest (with the notable exception of British Columbia) are from CBCs (Table 1). I have followed Raynor (1975) in not adjusting the CBC data by factors such as party hours, number of observers, or habitat coverage because searching for rails is a specialized task and published CBC data are unlikely to reflect actual searching for rails accurately. It is quite possible to "cover" a marsh without seeking rails, and rails rarely offer themselves to be tallied, especially in winter.

Vancouver, British Columbia, Seattle, Washington, and Coos Bay and Medford, Oregon, recorded the species on five counts from 1970 through 1989. Grays

Table 1 Sora Records on Pacific Northwest Christmas Bird Counts, 1970–1989

Year	British Columbia	Washington	Oregon	Total
1989	0	2	1	3
1988	0	1	2	3
1987	0	0	1	1
1986	0	0	5	5
1985	0	1	6	7
1984	2	0	4	6
1983	1	0	3	4
1982	0	1	0	1
1981	0	0	4	4
1980	1	2	1	4
1979	0	2	0	2
1978	0	0	2	2
1977	0	0	2	2
1976	1	2	1	4
1975	0	2	0	2
1974	3	0	0	3
1973	0	0	1	1
1972	1	1	0	2
1971	0	0	2	2
1970	0	0	1	1
Average per year	0.5	0.7	1.8	3.0
Total	9	14	36	59

Harbor, Washington, and Sauvie Island, Oregon, found Soras on four counts during this period. The northernmost location reporting the species was the Penticton, British Columbia, CBC. Four counts in British Columbia, four in Washington, and 13 in Oregon recorded Soras between 1970 and 1989. Records of multiple birds were more regular in the southwestern corner of Oregon than in the rest of the region, and as many as five Soras wintered at Port Orford, Curry Co., one year (Heinl 1986), but otherwise winter records are scattered more or less evenly along the coast (Figure 1).

Fifteen additional winter records of Soras in the Pacific Northwest, mostly of single birds on or near the coast, were published from 1970 to 1989. They generally match the geographic pattern shown by the CBC results. Of these records, two are from British Columbia, five are from Washington, and eight are from Oregon. Two of the latter records are from Malheur National Wildlife Refuge, where the CBC has not recorded the species.

The Virginia Rail (*Rallus limicola*) winters regularly in numbers in the Pacific Northwest, particularly at fresh water near the outer coast and around Puget Sound. The CBC maximum of 60 was found at Lincoln City, Oregon, in 1985, and counts of over 20 birds are not uncommon on coastal Oregon and Washington CBCs when appropriate habitat is well covered. Counts on the southwestern British Columbia coast have found numbers exceeding 10 birds regularly in recent years. Virginia Rails winter regularly in smaller numbers in the temperate interior valleys of western Oregon and Washington. The species winters irregularly at favored locations, sometimes on running water, east of the Cascade Range.

Knowledge of the Virginia Rail's winter range is apparently increasing; 12 years ago Rogers (1980) wrote that the species was "almost unheard of" in the inland basins of the Northwest in winter. This increase in reports (see also McQueen 1981, Heinl 1987) is more likely a consequence of increased observer effort at favored wintering locations than an indication of a winter range expansion. The most important factor in the increase in reports is certainly the expanded availability in the past 20 years of small inexpensive portable tape players.

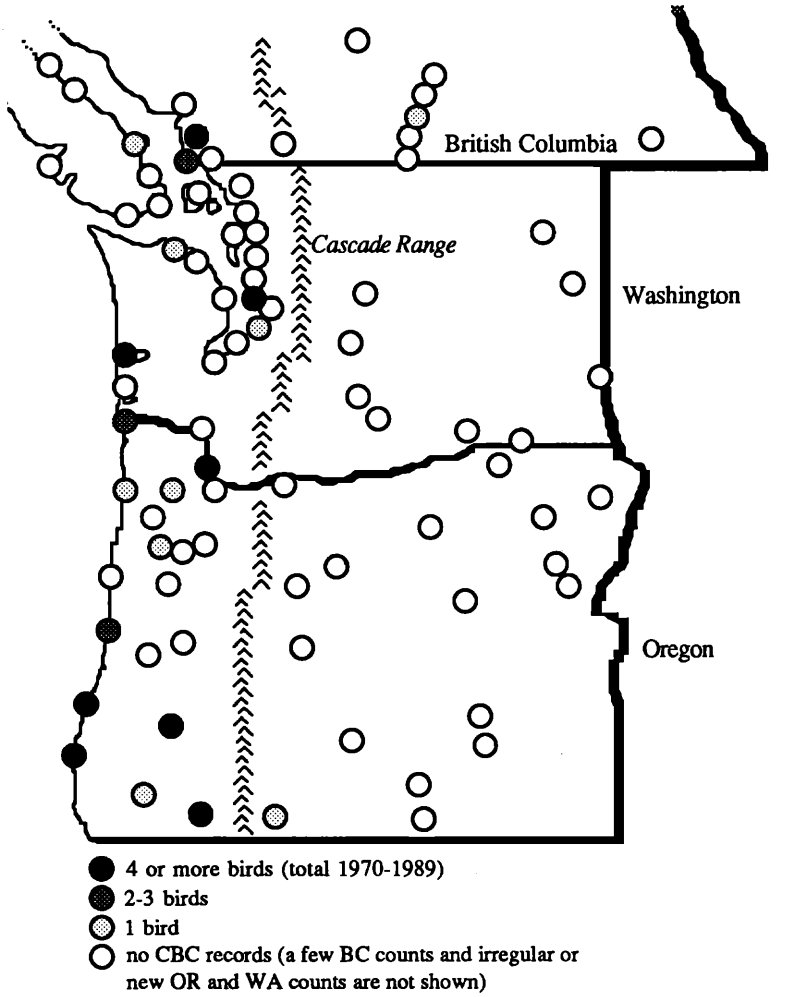

Figure 1. Locations of Christmas Bird Count records of the Sora in the Pacific Northwest, 1970–1989.

According to Ripley (1977), Soras are less inclined than Virginia Rails to use marshes with salt or brackish water and are more likely to forage in drier areas. On the Oregon coast winter Soras prefer freshwater marshes and even open swamps with sufficient emergent vegetation, especially cattails and sedges. They are not usually expected in Oregon's limited coastal salt marshes. Virginia Rails appear more flexible in their wintering habits, appearing in marshes but also in marginal habitat such as overgrown ditches, wet grassy swales, and even shallowly flooded thickets of willows with no sedges, cattails, or emergent grasses.

The Sora is said to be sensitive to cold (Bent 1926) and is more regular in those parts of the Pacific Northwest where extended periods of freezing are rare. It is not clear, however, why the Virginia Rail, with a summer diet reported in one study to be 62% insects, would be less sensitive to cold than the Sora, which is reported to eat 73% seeds (Horak 1970). Although differences in biomass between the two species' food sources may explain part of the difference in wintering patterns, differences in food habits alone appear unlikely to explain fully why Soras do not winter in comparable numbers in unfrozen areas with large concentrations of Virginia Rails. The Virginia Rail is slightly larger than the Sora, which may provide marginally better energy efficiency during cold periods. Other factors may be involved, and this subject deserves further study.

One of the difficulties in evaluating winter records of Soras is that some of these are of calling rails that were not seen. Rail sounds can be confusing (e.g., see Manolis 1981, Bailey 1977, Bollinger and Bowes 1973), and I have seen and heard Virginia Rails make descending "keek keek" notes in winter that are similar in tone to some Sora sounds. Although Soras are less vocal in winter than are Virginia Rails, they do make some sounds that may aid in identification and others that may confuse observers.

According to Gochfeld (1972), Soras wintering in Trinidad uttered "a brief nasal 'ka' and a more plaintive 'peeyanh' ending with a rising inflection . . . similar to call notes I have heard from Soras on their breeding grounds." Kaufmann (1983), however, reported that a "kiu" note given by both Soras and Virginia Rails is not distinguishable between the two species. In addition, Soras and Virginia Rails occasionally respond to taped calls of the other species, albeit with their own sounds, not imitations. For this reason I usually play tapes of both species when attempting to elicit a response. I have occasionally located Virginia Rails with a Sora tape when they had not responded to a tape of their own calls, and vice versa. This circumstance necessitates considerable observer caution in identifying a bird responding obscurely to a taped recording of either species.

Although some winter Sora records are of seen birds, e.g., one on the Florence, Oregon, 1986 CBC, which was observed making a typical ascending "peeyanh" call (Mike Patterson pers. comm.), and six of the seven early British Columbia records are of specimens, some other identifications are less certain. Until more observers are familiar with the Virginia Rail's range of vocalizations, the uncertainty of some winter Sora records is likely to continue. I included all CBC records in Table 1 because it is usually impossible to determine whether a bird reported on a CBC was heard or seen, as *American Birds* does not retain details for unusual species. Regional editors of field notes and CBCs should alert reporters to this potential problem and specify when possible in published reports whether the birds were seen or how heard birds were identified.

From the limited data available, some of which are questionable, it appears Soras can be found occasionally in winter in favored locations in the coastal lowlands of southwestern British Columbia and along Puget Sound and in freshwater marshes and some partly wooded swamps along the outer coast of Washington and Oregon. They are more regular and more numerous along the south coast of Oregon and in

nearby temperate interior valleys. In this area the species is probably of annual occurrence in small numbers.

Rails in general are under-sought and under-reported. Additional attention should be given to determining their status, especially as wetlands preservation becomes a more visible and central part of policy agendas of public land management agencies at all levels. Many winter Sora records are at best unverified and may represent misreporting of unfamiliar Virginia Rail sounds, so observers reporting Soras in winter should attempt to see the bird.

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