

meadowlark. 640.2 meadowlark, temp 32°F, elevation approx. 100 ft. 645.5 Gilliam Co. line. 646.6 first bay from Columbia River, some ice. Can just see other side of Columbia River thru the fog. All ground covered with snow. 656.2 29 mallards generally distributed in river (Columbia). 657.4 middle of bridge at Arlington. 661.0 horned lark. 662.4 sparrow hawk. 663.9 2 raven flying down river. 667.4 sparrow hawk. 668.7 raven. Columbia River mirrorlike. 672.7 sparrow hawk. Occasionally a duck on the river. Could be the eared grebe. Up to this point observed approx. 400 rock pigeons all the area of cliffs bordering the river. They were all sitting on the railroad tracks of the U.P. line, and grouped in 2 or 3 to 40 individual scales. They were far removed from habitation of man and were probably using the cliffs for nesting in summer. 676.4 first western grebe observed; magpie. 677.1 magpie, raven. Have not observed deer tracks in snow. 680.7 magpie. 681.2 middle of bridge over John Day River, temp. 34°F at 11:25 A.M. water surface rippled as we approach dam area, all other areas mirrorlike. 683.6 John Day dam. water below dam moving with a current. 686.9 localized group of ducks (100 or so). Eared grebe. Ice falls on cliffs to S. Cormorant. Coot. waters at Mary Hill bridge are now mirrorlike. Exit 104 to bridge (Mary Hill) at 691.4 at overpass. Approx 30 ducks below bridge. Of the waterfowl observed so far 90% are coot, 8% are mallards and 2% are buffle head, Barrow golden-eye and other unidentified species. up to 695.8 there have been 3,000 coot. One group of 800. Ducks increasing in number including 1 great blue heron, 4 gulls, 8 cormorant and 20 mallards, and hundreds of coot. Second western grebe so far. First gulls flying up river (2). Exit 97 at 698.8, Celilo Falls. Landlocked ponds along river are in ice. Columbia free of ice. 700.1 bridge across river (railroad only). 700.8 1 group 1000 lesser scaup. 702.5 8 hooded merganser. The general picture of ducks on the Columbia has been: upper reaches only an occasional duck but now groups of several hundred are always in view. 703.9 first Canada geese (12) and a magpie. The lower down the river the more ducks, and in this area approx. 1000 per  $\frac{1}{2}$  mile.