

birds were singing very agreeably this morning, particularly the common robin.

Mar. 16. The anchovy has ceased to run; the white salmon-trout have succeeded them; the weather is so warm that insects of various species are every day in motion.

Mar. 22.⁵ The leaves and petals of the flower of the green huckleberry have appeared; some of the leaves have already obtained one-fourth of their size.

Mar. 24. The brown briery shrub with a broad pinnate leaf has begun to put forth its leaves; the polecat calwort [kalewort—the skunk cabbage, *Symplocarpus foetidus*?] is in bloom; saw the blue-crested fisher [*Ceryle alcyon*]; birds are singing this morning; the black alder is in bloom.

Mar. 25. The elder, gooseberry, and honeysuckle are now putting forth their leaves: the nettle and a variety of other plants are springing up; the flowers of the broad-leaved thorn are nearly blown; several small plants in bloom.

Mar. 26. The humming-bird has appeared; killed one of them and found it [to be not] the same with those common to the United States.⁶

Mar. 27. The small or bank martin [*Clivicola riparia*] appeared to-day; saw one large flock of them; water-fowl are very scarce; a few cormorants, geese, and the red-headed fishing-duck [*Mergus serrator*] are all that are to be seen. The red flowering currant is in bloom; this I take to be the same species I first saw on the Rocky mountains; one fruit is a deep purple berry, covered with a gummy substance and not agreeably flavored. There is another species, not covered with gum, which I first found on the headwaters of the Columbia, about the 12th of August last.

(p. 516) *Mar. 23.* This evening we saw many swan passing to the north as if on a long flight; vegetation is not by several days forward here as [it was] at Fort Clatsop when we left that place; the river is rising fast; the water is turbid; the tide only swells the water a little, but does not stop the current; it is now within two feet of its greatest height.

Mar. 30. The grass is about 16 inches high in the river bottoms; the frogs are now abundant.

Apr. 1. From the best opinion I could form of the state of the Columbia on the 1st of April, it was about nine feet higher than when we descended it in the beginning of November last.

Apr. 6. The cottonwood has put forth its leaves and begins to assume a green appearance at a distance; the sweet-willow has not yet burst its buds, while the leaves of the red and the broad-leaved willow are of some size; it appears to me to be the most backward in vegetating of all the willows; the narrow-leaved willow is not found below tide water on this river.

Apr. 8. The male flowers of the cottonwood are falling; the gooseberry has cast the petals of its flowers, and its leaves have obtained their full size; the elder which is remarkably large, has begun to bloom; some of its flowerets

⁵ Mar. 23d the party started back up the Columbia.

⁶ The humming-bird of the "United States" [*Trochilus colubris*] does not occur on the Pacific coast. The species observed was probably *Selasphorus rufus*.