

Nesting--May 29, 1938, nest in the Cranbrook marsh containing five partly incubated eggs; as this marsh dried up in the latter part of July it is doubtful if any young survived. On July 1, 1937, a pair were breeding on Jap lake. The nest, raised about five inches above the water-level, was on an open mud flat covered with three inches of water and devoid of any vegetation. Close inspection of the nest could not be made owing to the extreme fluidity of the mud, but the pair were watched for some time with binoculars; one adult continued incubating while the other made frequent journeys to deep water and after diving, returned with vegetable matter in its beak, which both birds helped to arrange about the nest; in going to and from the nest, the bird had to propel itself, with difficulty, through the shallow water and mud for at least twenty feet before it had sufficient water to dive in. The site was again visited on July 24; the nest was unoccupied and out on the lake an adult was followed by one young.

Turtle lake is a typical East Kootenay dry forest "pot hole" of about twenty acres in extent; the muddy shores have no marginal vegetation other than grass and sedge which is kept closely cropped by range cattle; on June 2, 1940, two horned grebe were on the lake; both were diving and returning to the surface with weed that was being used as material for a nest under construction, it being attached to a partly submerged limb of a dead and weather-beaten yellow pine that had fallen into the water some years previously; on June 8, the nest contained one egg completely covered by weed, both birds were at the other end of the lake diving. As the nest was approached on June 13, the grebe left the nest, dived, and surfaced about thirty feet away. The nest contained five uncovered eggs; the other grebe was not seen.

Black-Necked Grebe--Colymbus nigricollis (Brehm)

Decidedly uncommon, and there is no marked spring migration, nor is there any evidence of breeding in this area.

Migration, spring--April 30, 1940, five on the Kootenay river near Wardner; April 28, 1948, ten on Baynes lake, in company with ruddy ducks; May 5, 1948, one on a small slough near Canal Flats.

Western Grebe--Aechmophorus occidentalis (Lawrence)

Transient only, no evidence of breeding in this area.

Migration, spring--April 18, 1941, forty on Moyie lake;

March 25, 1941, ten on Columbia lake; April 10, 1946, approximately two hundred on Wasa lake.

Migration, autumn--Latest date noted, November 25, 1940.

Nesting--June 7, 1941, female with seven young, Cranbrook slough; Aug. 9, 1942, female followed by seven "flappers," on Columbia lake; July 12, 1947, female followed by six downy young, Columbia lake.

Shoveller--Spatula clypeata (Linnaeus)

A decidedly uncommon spring transient. No autumn records, and only one summer record, that of a male partly in eclipse plumage on August 2, 1944, in the Cranbrook marsh.

Migration, spring--May 24, 1939, two males in the Cranbrook marsh; May 3, 1942, four males and five females in courtship, Turtle lake; April 27, 1945, forty-eight, sexes about even, on Hay ranch slough.

Wood Duck--Aix sponsa (Linnaeus)

This is a rare duck in the district, and no summer records have been obtained to indicate that they might possibly nest in the Kootenay or Columbia valleys.

Spring records--April 11, 1937, a pair on Wasa slough; May 6, 1939, a pair on Columbia lake.

Autumn records--October 22, 1943, one in female plumage shot on Columbia lake; September 18, 1946, one in female plumage seen in hunter's bag at Spillamachene.

Redhead--Aythya americana (Eyton)

A rare spring migrant. No summer or autumn records.

Spring records--March 29, 1940, nine males on Wasa lake; June 9, 1941, two males on Columbia lake; April 24, 1942, nine males and three females on McClures pond.

broods, and it is a common sight in a late summer evening to see a party of fishing mergansers working their way along the shore, and when approaching a small, shallow bay, fanning out into a crescent and working toward shore, driving numerous minnows (Richardsonius) and other small fish ahead of them. Suddenly there is a tremendous splashing as the mergansers catch up with the encircled fish, and so vigorous is the attack, that on a quiet evening, the noise made by the diving and splashing can be heard for a considerable distance.

Migration, spring--March 28, 1937, a pair on the Kootenay river, near Wardner; April 14, 1938, two males and three females on the Kootenay river near Wardner; March 31, 1939, a male collected at Dutch creek; March 10, 1940, one male on the Kootenay river near Wardner; March 16, 1941, one male on the Moyie river; March 17, 1942, one male on the Moyie river; March 26, 1948, three males on Columbia lake.

Migration, autumn--November 25, 1939, five in female plumage at Rushmere; October 30, 1942, four in female plumage on Columbia lake.

Nesting--June 16, 1941, female with seven downy young; June 8, 1942, female with seventeen downy young on Columbia lake; June 8, 1947, three females with broods of eleven, nine, and seven downy young; July 12, 1947, female with nine downy young on Columbia lake.

Winter records--December 18, 1939, six on the Moyie river; January 6, 1943, one male and two females on the Moyie river; February 10, 1944, a male and female on the Kootenay river near Wardner.

Red-Breasted Merganser--Mergus serrator Linnaeus

Rare, one male seen on April 21, 1942, at Dutch creek, Columbia lake.

Hooded Merganser--Lophodytes cucullatus (Linnaeus)

Rare, a male and female seen together on Baynes lake on April 19, 1945.

Turkey Vulture--Cathartes aura (Linnaeus)

Regular summer visitant in limited numbers. There seems to be no reason why the vulture should not nest in this district, but so

that their first appearance occurred between April 12 and April 28.

Migration, spring--April 20, 1937, two males, St. Mary prairie; April 28, 1938, twenty-three counted at Newgate; April 17, 1939, two males at Cranbrook; April 27, 1941, one male at Newgate; April 16, 1943, one male at Moyie; April 12, 1944, two males at Cranbrook; April 19, 1945, two males at Baynes lake; April 21, 1946, one male at Wasa; April 20, 1947, one male at Wasa.

Migration, autumn--October 21, 1938, one female at Wasa; October 25, 1939, one at Moyie; October 18, 1940, one at Moyie; October 9, 1941, one at Windermere; October 2, 1944, one at Ta Ta creek; October 9, 1946, one at Waldo; October 7, 1948, four at Wasa.

Nesting--April 28, 1937, a pair copulating on the top of a telephone pole at Wasa; July 1, 1938, four young in pin feathers in a cavity in a yellow pine stump. The hole was four feet from the ground, and the cavity was eighteen inches deep. May 24, 1947, a female was seen entering a hole in a dead tamarac tree. Tapping the tree failed to make the bird come out again.

Blue Grouse--Dendragapus obscurus richardsonii (Douglas)

Resident. More or less confined to the Sub-Alpine Forest and Southern Alplands Biotic areas except in the summer, when some breeding birds descend to the valleys to nest.

Nesting--June 28, 1938, female with brood of six chicks at Ta Ta creek; August 4, 1942, female with three large young at Columbia lake. On May 29, 1948, two males were seen to be fighting on the highway south of Kimberley. The car was stopped, and the battle watched for some time; the two cock grouse would rush together and seize each other by the neck, both endeavouring to force the other's neck to the ground, then let go, back up and rush together again. When finally approached they separated reluctantly, one flying away, followed by a female, who up to that moment had been hidden by some weeds at the roadside; the other male with feathers erect walked into some weeds.

Franklin Grouse--Canachites franklini (Douglas)

Resident, and formerly plentiful in the Sub-Alpine Forest Biotic area, but now relatively scarce. It is difficult to account for this decline in numbers, for few are shot each year by hunters.

Nesting--July 23, 1946, female brooding four chicks which flew up into a spruce tree when the female was disturbed; this was on