Survey of Sheep along the Yukon River from Minto to Fort Selkirk and on Mount Hansen (GMS 3-20).

Date: 27 June 2012

Time: 10 hours

Weather: Mostly cloudy, passing light rain, +10°C to +15°C,

slight wind.

Boat Pilot: David Johnny

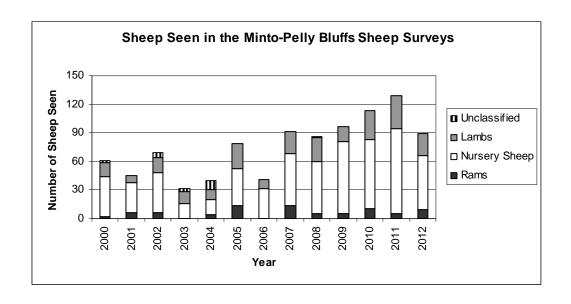
Navigator/Observers: Mark O'Donoghue, Troy Hegel, Pat Van

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This is the thirteenth consecutive year that we have surveyed the sheep population along the Yukon River between Minto and Fort Selkirk by boat. These surveys were initiated in response to community concerns about the status of the sheep population and the condition of its range.

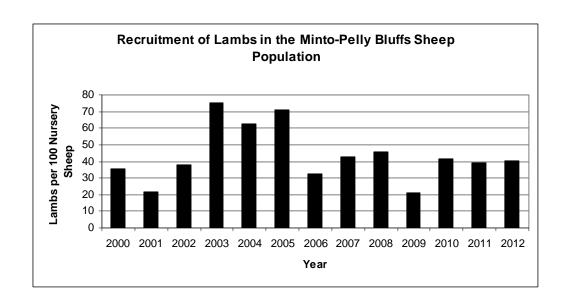
Sheep have been noted along this stretch of river only since the 1960s. They were counted from the air 4 times previously, in March 1989 (19 sheep seen), July 1991 (17 sheep), May 1994 (18 sheep) and March 2000 (23 sheep). All of these flights were conducted opportunistically while en route to other areas, and none were thorough searches of the whole area. These sheep spend a great deal of time in forested areas, and they are therefore difficult to count.

In 2000, we started counting sheep in this area by travelling in a boat down the Yukon River from Minto to the Pelly River confluence and stopping wherever we saw sheep to classify them using a spotting scope. In 2001, we also started climbing and walking along the southern slopes of Mount Hansen and counting sheep there on foot after the boat survey. Between 2000 and 2011 we saw 31-129 sheep along this route, mostly ewes, yearlings, and lambs; the high count of 129 sheep was in 2011. Most sheep have been on the Minto Bluffs, about 8 km down river from Minto, on "Split Mountain" (an old volcano immediately south of Mount Hansen), and on the south slopes of Mount Hansen (see map).

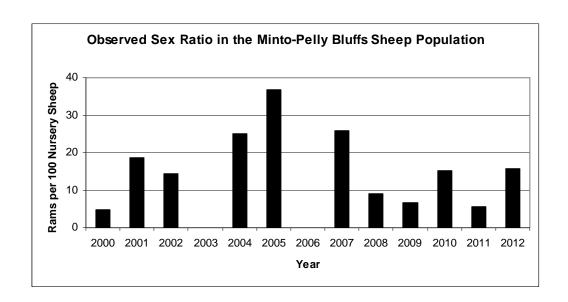


This year, we repeated the same boat and ground surveys as we have the past twelve years. We spotted and classified a total of 89 sheep; unlike the 2006 and 2008 counts when 2-3 Fannin coloured rams were seen, all sheep seen this year were white. This is lower than counts during the last 3 years and about equal to the 2007-2008 totals. However, we missed at least one large group of sheep, apparently because it was in forested cover, during this count. In a boat trip up the Yukon River from Fort Selkirk to Minto 5 days later (on 2 July), we counted a minimum of 120 sheep visible from the river, 71 of them on the Minto Bluffs. On this 27 June count, we saw 10 sheep (8 ewes and yearlings, and 2 lambs) on the Minto Bluffs (see map). We saw 46 sheep (3 half-curl rams, 28 ewes and yearlings, and 15 lambs) on the open slopes northeast of the southern-most Ingersoll Islands. Four rams (2 ³/₄-curl and 2 half-curl) were on the highest open bluffs of Split Mountain. Lastly, we saw 29 sheep (2 half-curl rams, 21 ewes and yearlings, and 6 lambs) in five groups on Mount Hansen.

The number of lambs relative to the number of nursery sheep in June and July—because they're difficult to tell apart from a distance, ewes and yearlings are collectively known as "nursery sheep"—is used by biologists as an indication of how well juvenile sheep in a population are surviving. About 25 lambs for every 100 nursery sheep is considered adequate for a stable population. In this survey, we saw 23 lambs and 57 ewes and yearlings, or 40 lambs per 100 nursery sheep, which indicates good survival of lambs this year. Lamb production in this population has been very good in most years since 2000.



As with most surveys of this population, we saw relatively few (9) rams this year. The observed sex ratio was 16 rams per 100 nursery sheep. Groups of rams typically remain separate from nursery groups during the summer. Given the healthy recruitment, a low sex ratio is unlikely to be a problem in this population, so we are probably not surveying some of the areas where ram groups are located.



These boat and foot surveys are an ideal way to survey this sheep population. We have seen good numbers of animals in each of the past twelve years. This is a growing population based on our total counts and the high recruitment we have observed. This is a small, mostly unhunted (but very accessible) group of sheep with a limited amount of range, and we will continue to monitor its status.

