

# **How many lambs did you see?**



**A pilot project between  
Yukon Department of Environment  
and  
Yukon Fish and Game Association**

**PR-02-01**

This summer, for the first time, sheep hunters and others were asked to report how many lambs and nursery sheep they saw. Nursery sheep are ewes, yearlings, and the few 2-year-old rams that have not yet joined the ram bands. With this information, we can predict if the population is increasing or decreasing, and what hunting opportunities will likely be 7 or 8 years from now (when the male lambs are old enough to be full curl). This wasn't an attempt to count all of the sheep in any area, but to try and get a sense of whether it was a "good" year or a "bad" year for lamb production.

## Results

### Who made the observations

Most of the observations came from Yukon Environment or Parks Canada surveys, but these were in only 5 of the 11 Game Management Zones. From hunters, outfitters, and others we received information for 4 zones that we would otherwise know nothing about.

| Zone  | Government surveys | Resident hunters | Non-resident hunters | Outfitters | Others | Number of sheep groups |
|-------|--------------------|------------------|----------------------|------------|--------|------------------------|
| 1     |                    |                  |                      |            |        | 0                      |
| 2     | 1                  |                  |                      | 2          |        | 13                     |
| 3     | 1                  |                  |                      |            |        | 2                      |
| 4     | 1                  |                  | 1                    |            |        | 29                     |
| 5     |                    | 3                |                      | 2          | 1      | 33                     |
| 6/KNP | 1                  | 1                |                      |            |        | 9                      |
| 7     | 1                  | 6                |                      |            | 1      | 45                     |
| 8     |                    |                  | 1                    |            |        | 5                      |
| 10    |                    | 1                |                      |            |        | 2                      |
| 11    |                    |                  |                      | 1          |        |                        |
| All   | 5                  | 11               | 2                    | 5          | 2      | 94                     |

## What was reported

| Zone | Lambs | Nursery sheep | Ratio |
|------|-------|---------------|-------|
| 2    | 25    | 55            | 45%   |
| 3    | 16    | 42            | 38%   |
| 4    | 81    | 275           | 29%   |
| 5    | 123   | 404           | 30%   |
| 6    | 84    | 385           | 22%   |
| 7    | 134   | 427           | 31%   |
| 8    | 12    | 22            | 55%   |
| 9*   | 3     | 6             | 50%   |
| 10   | 9     | 16            | 56%   |
| 11   |       |               | 35%   |
| All  | 381   | 1316          | 29%   |

\*The hunter reported 3 groups of sheep, with each group consisting of 3 ewes and 6 lambs. Twinning is extremely rare in wild sheep, so I'm a bit skeptical that 9 ewes in 1 subzone would each have twins, and then band altogether.

## Discussion

### Observations

There was very good lamb production throughout the Yukon in 2002 (map attached). After 2 years of "negative growth", or a probable population decline, it's likely that enough lambs were born to replace those animals that will die this year. A chart showing how this year's information compares to past years' is included in this report.

Typically, about 25-30 lambs/100 nursery sheep are needed for a stable population. These numbers are based on what is seen early in the summer, during aerial surveys, so slightly lower ratios in August will likely still indicate population growth.

Because lamb production was so low in 2001, there were probably very few yearlings included in the "nursery sheep" count. This would make the ratios higher than in years following good lamb production when many yearlings will be included in the total count, but won't be old enough to have lambs.

Two different observers reported seeing sets of twins. Twinning is supposed to be very rare in wild sheep, but we haven't done any studies here to see how common it really is. Perhaps after 2 years of not raising lambs, ewes were in good enough shape to produce twins. It seems

unlikely that what was seen were orphaned lambs following another ewe, but that is another possibility.

I suspect that if we had more observations for Zones 8, 9, and 10 we would see the ratio drop a bit. The more observations we have for an area, the more confident we can be that we are seeing a true picture.

August observations in Zone 4 showed 19 lambs/100 nursery sheep, compared to the 31 lambs/100 nursery sheep we saw during helicopter surveys in June. That seems like a rather high loss through the summer months, and could be related to the few number of observations.

## **Project**

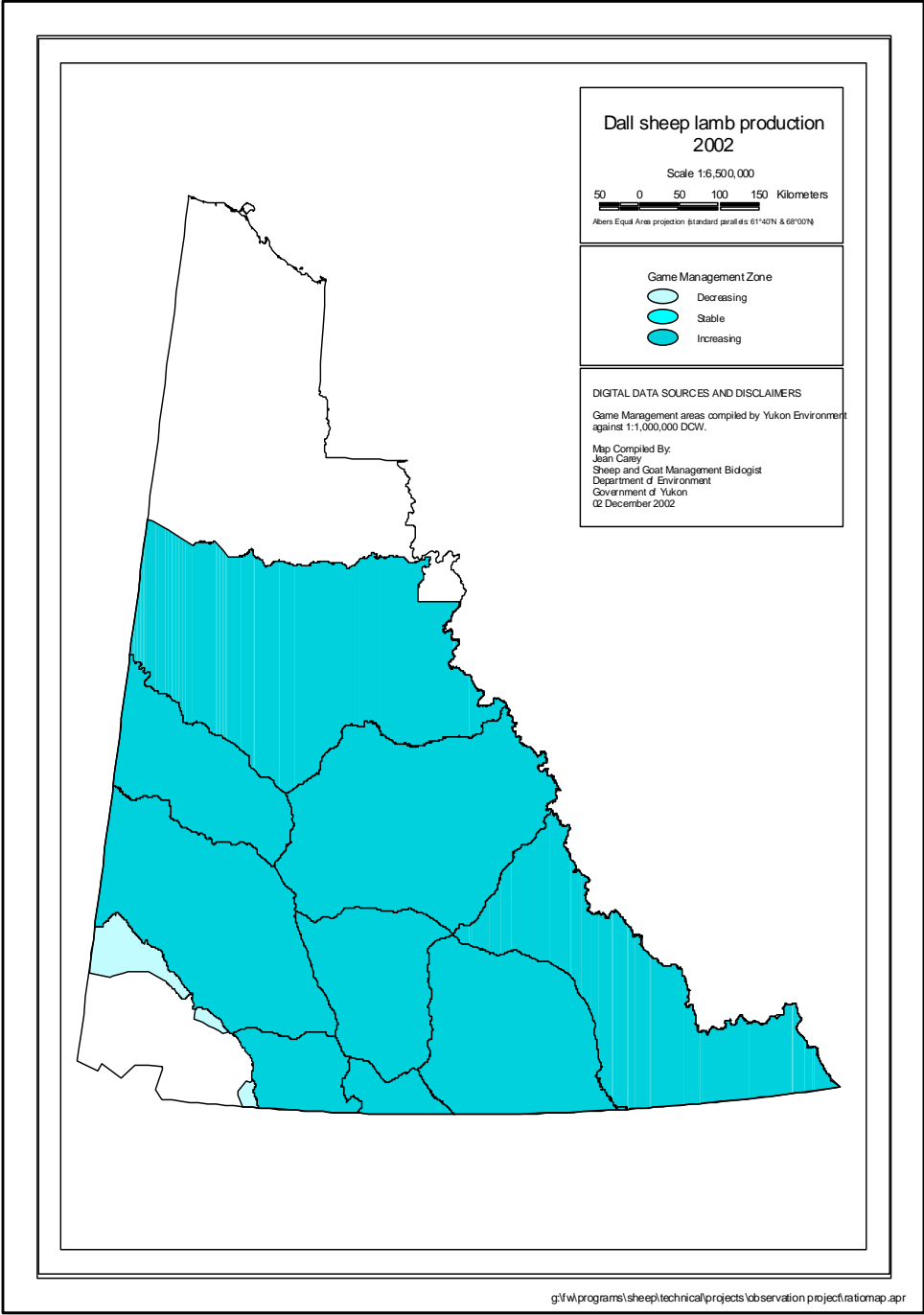
The hunting regulation synopsis had a tear-out form for observers to use. Copies were also available in the Whitehorse office, so successful hunters could report their sightings at the same time as their horns were being plugged. Most, if not all, of the approximate 1,300 hunters who bought sheep tags in 2002 should have had a copy of the form. We know, though, that most of the resident hunters who buy sheep tags don't actually go hunting.

The project was promoted by

- YTG display ads before the hunting season
- YTG news release (on-air clip with CKRW August 2, Whitehorse Star August 15)
- reminder ads in the local newspapers placed by the Yukon Fish and Game Association at the end of October

One of the principles this year was to start with a small, focussed project. It would have been great if more hunters had reported what they saw, but the information we did get is very useful. It always takes time for people to get in the habit of doing anything, so I think the project should continue as it is set up for at least another year. In the meantime, we should talk to sheep hunters and find out how we can make it easier for them to participate.

Jean Carey  
Sheep and Goat Management Biologist  
Yukon Environment  
December 2002



**Dall sheep productivity in the Yukon  
compiled from best available information  
1973-2002**

