

Field markings of Altai mountain ungulates

For volunteers participating in transboundary
Argali sheep population surveys on
Sailyugem Ridge

Survey Tasks

- Species identification of encountered ungulate groupings
- Identification of animals by sex and age
- Complete & accurate documentation of observations



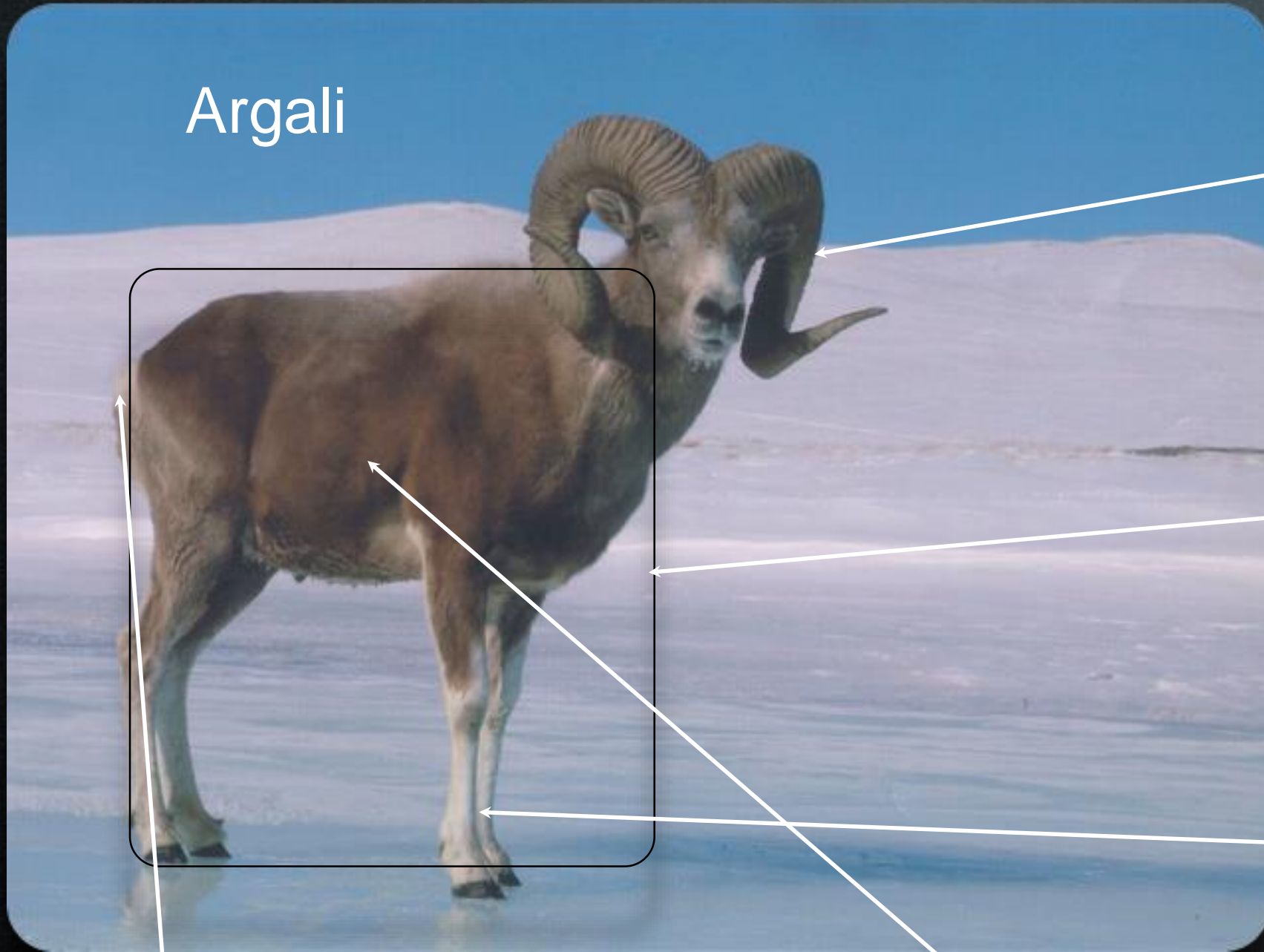
Argali (*Ovis ammon ammon*)



Ibex (*Capra sibirica*)

Differences between males of both species are clear and noticeable even at great distance

Argali



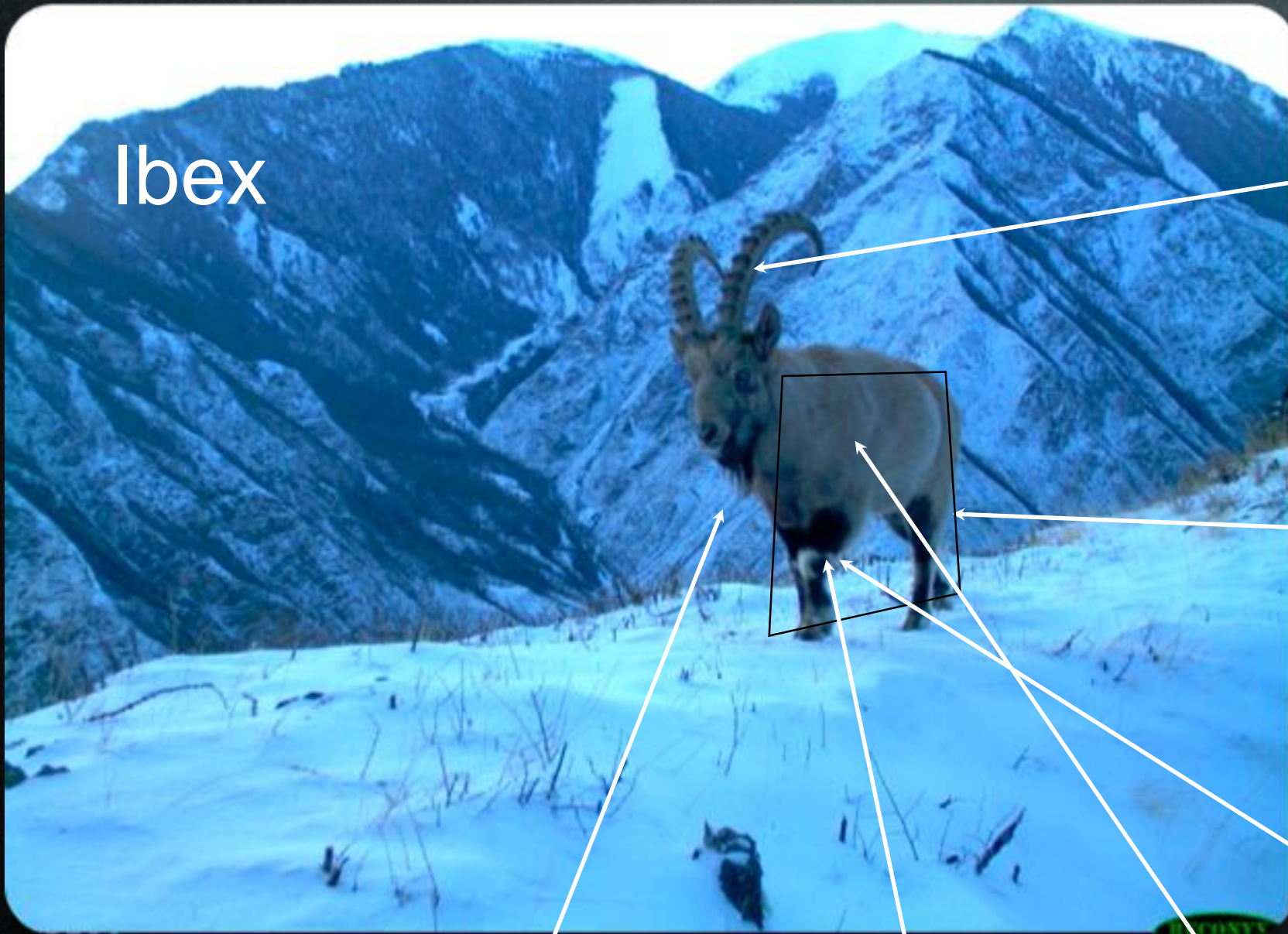
Spiralling
horns

Square body

Relatively long
limbs

Pure white "mirror" on rump

Darker body color



Ibex

Saber-shaped curving horns

Oblong body

Short, strong limbs

Beard

Black tail, legs

Lighter body color

Argali



006114



Ibex



43900



Differences between females are more subtle, especially when viewed at a distance



Horns are spread more widely to the sides, with tighter curls

Square body

Darker coat

Pure white "mirror" and tail













Black tail on a white mirror is noticeable from a distance

Adult animals have beards

Oblong body

Lighter color

Horns are closer together

Less horn curvature







Age & Sex Differences in Argali

Older males are 1.5 times larger than females and have very large horns





Females are 1.5-2 times larger than yearlings

2012-07-10 6:06:54 PM M 3/3

16°C



H13900

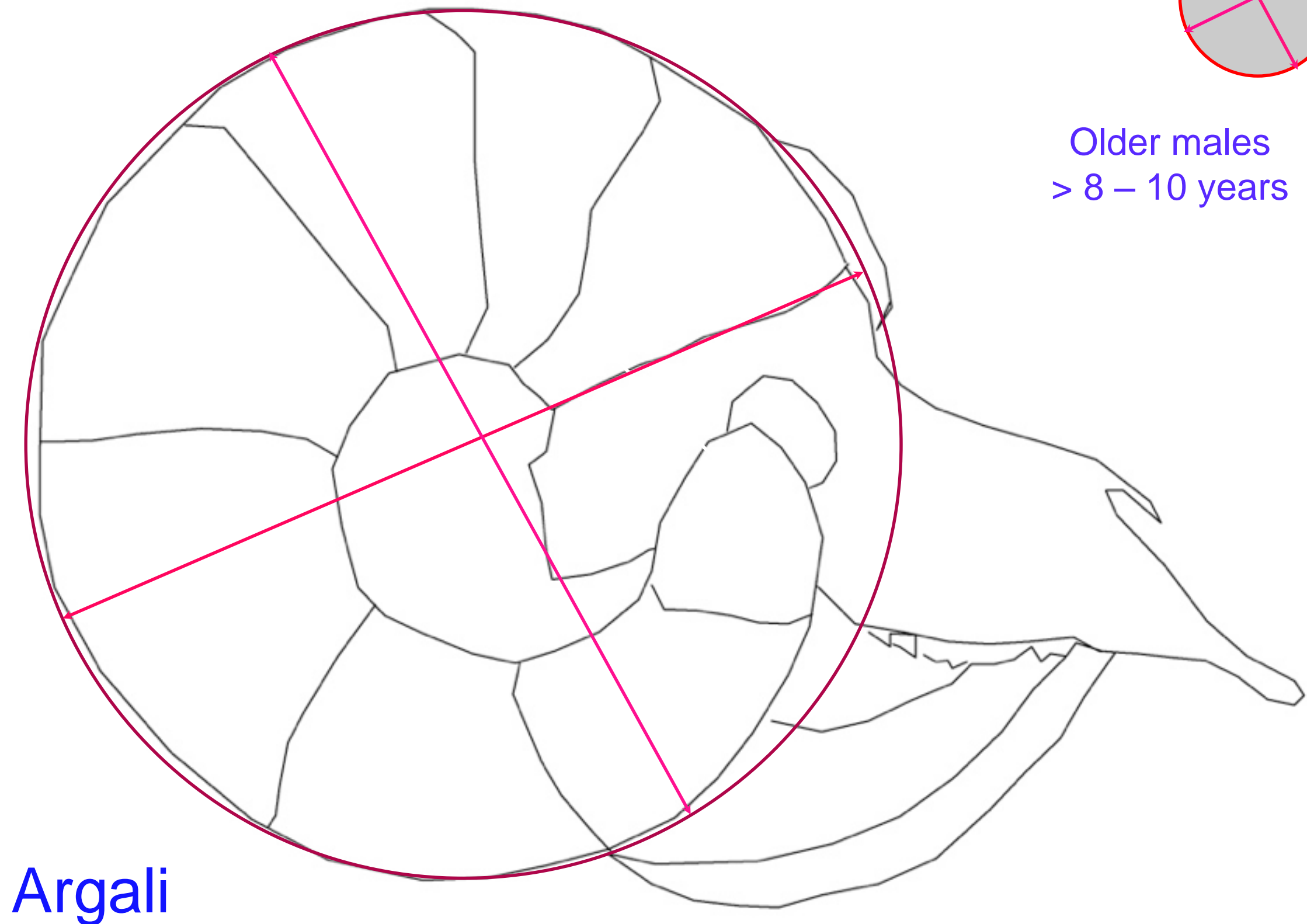
RECONYA

In July, lambs are 2-3 times smaller than adult females and have a darker coat

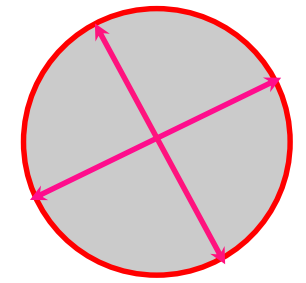


**Determining the age of male argali
using horn size in field conditions**

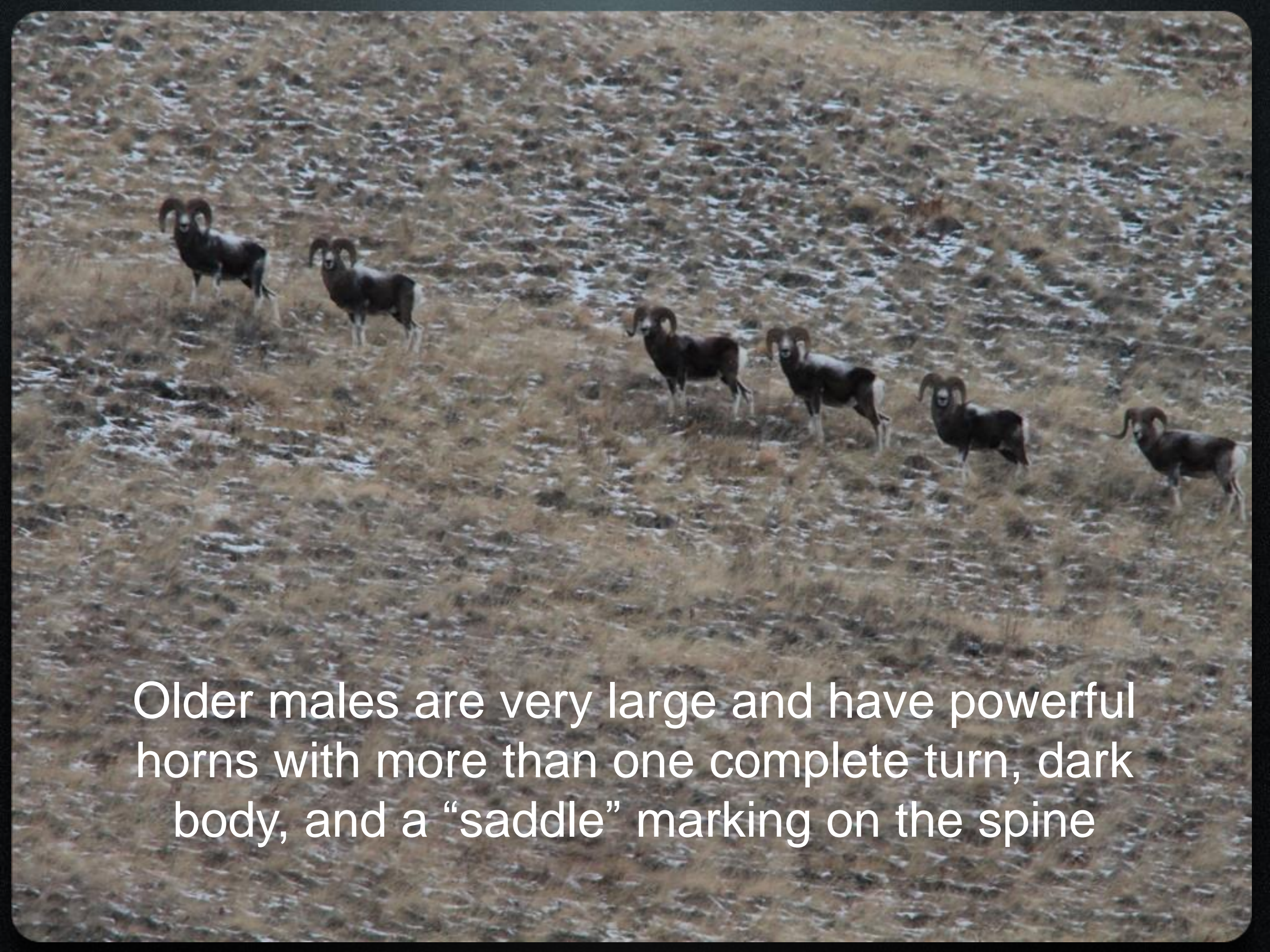




Argali

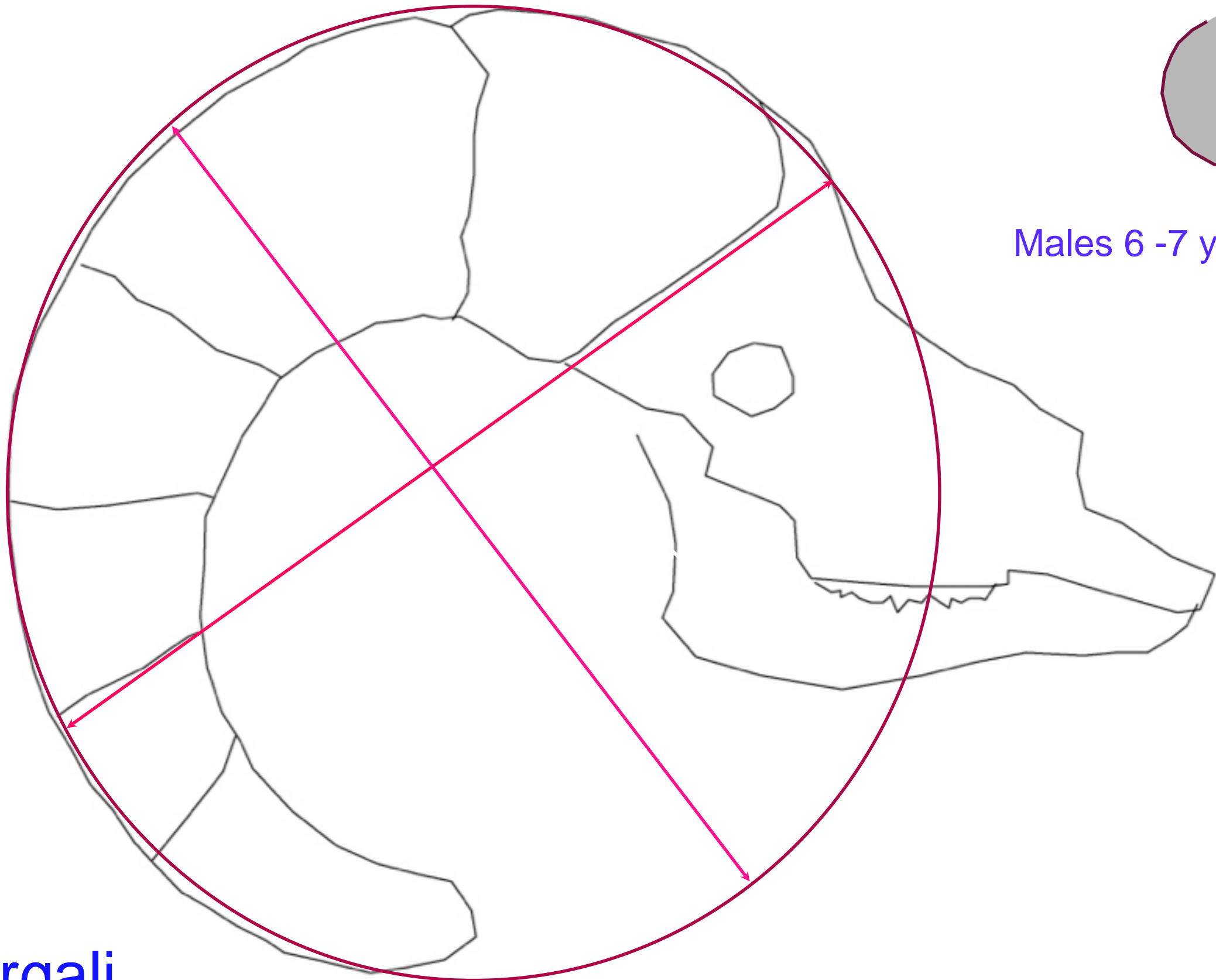


Older males
> 8 – 10 years

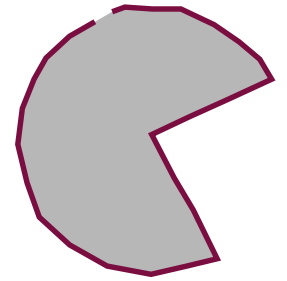
A photograph of seven bighorn sheep standing in a field of dry, brown grass with patches of snow. The sheep are arranged in a loose line across the middle ground. They have dark bodies and prominent, thick, spiraling horns. The background is a vast, open landscape under a pale sky.

Older males are very large and have powerful horns with more than one complete turn, dark body, and a “saddle” marking on the spine

Argali



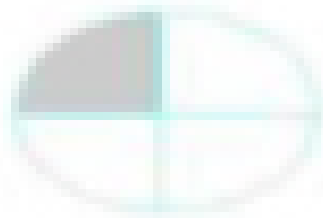
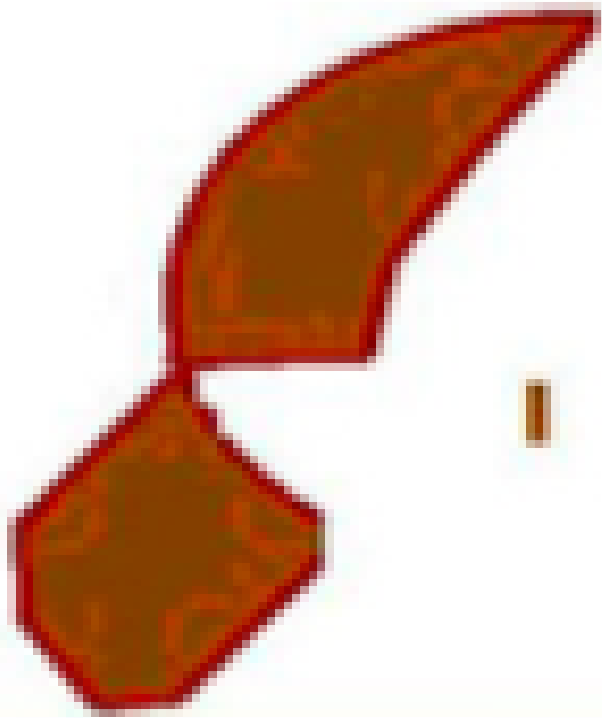
Males 6 -7 years of age



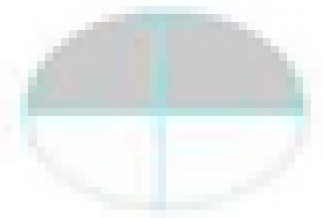


6-7 year old males have horns with a $\frac{3}{4}$ turn. These are large males that participate actively during rut.

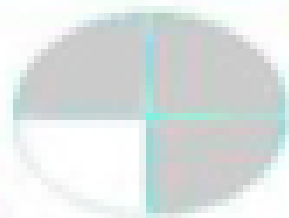
2 – 3 yrs



4 – 5 yrs




6 – 7 yrs



IY

> 8 yrs





Visual Surveying

While moving along a route, try not to spook animals.
Your goal is to see the argali before they see you.



Stop often and thoroughly study the surrounding areas.



Whenever feasible, always try to photograph any animals encountered. Use a zoom lens or a spotting scope with a camera attachment.



Time-permitting, use a tripod for photography. Reviewing images back at camp will make it possible to analyze the age-sex composition of each group.



Always record your observations of animal groupings right away – don't wait until later.

Important information that each observation team should record

- Date and time of sighting, time interval, name of observer
- Species observed
- Number of animals observed in a herd, also broken down by age-sex
- Note and describe animals with distinguishing marks (easily recognized), if any are observed in the herd
- GPS coordinates of observation location, angle on target, and approximate distance to it. Note the sighting location on the map.
- Provide a brief description of observed animals' activities (laying on the ground, grazing, on the move, etc.)
- Note the direction that the grouping was headed if moving or running away.
- Note the availability of a photograph or video of the animals

Happy “hunting”!
Greetings from our 2011 volunteers, the first
international survey team!

