Selection of Breeding Rams

Polypay ram
UW3379

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The ram is more than 50% of the flock!

50% of the genes of the lambs in the next crop come from the few rams used during the breeding season.

Since fewer ram lambs are needed as replacements compared to ewe lambs, rams can be more intensively selected than ewe lambs.

On average, rams should be genetically superior to ewes.

In well-designed selection programs, about 80% of flock genetic improvement comes from ram selection.

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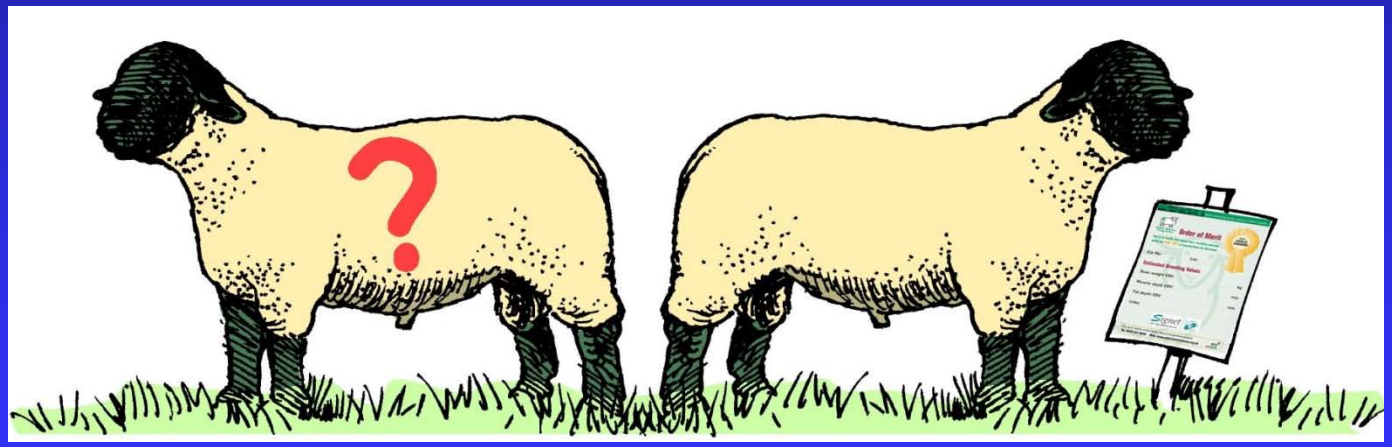
Ram selection/purchase is very important!

Rams need to be purchased from breeders serious about genetic improvement for traits important in your operation.

The most accurate estimate of the genetic value of an animal is its Estimated Breeding Value (EBV) or Expected Progeny Difference (EPD).



EPDs (EPD = ½ EBV) are calculated by the National Sheep Improvement Program (NSIP)

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NATIONAL SHEEP IMPROVEMENT PROGRAM

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EPDs for Hampshire Ram ISU 7104

60-day weaning wt, lb.	120-day postweaning wt., lb.	Maternal milk, lb.	Milk + Growth, lb.	Number born, no. lambs / 100 ewes
+ 1.5	+ 4.1	+ 0.1	+ 0.9	+ 1.1
Average for active adult rams:				
+ 0.0	+ 0.1	- 0.1	- 0.1	- 2.4

ISU 7104 is expected to sire lambs that weigh 4.0 lb. more at 120 days of age than lambs from an average NSIP active adult Hampshire ram.

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How much is a superior EPD worth?

50 commercial white-faced ewes mated to a Hampshire ram

Lambs sold at 180 days of age as market lambs

Average NSIP Hampshire ram:

50 ewes x 1.60 lambs/ewe x 122 lb. x $1.30/lb. = $12,688

ISU7104:

50 ewes x 1.60 lambs/ewe x 128 lb. x $1.30/lb. = $13,312

ISU7104 expected advantage = $624/year, $1248 in 2 years, and $1,872 in 3 years

Each 0.1 EPD of postweaning weight in a terminal sire is worth $15.60/yr ($46.80/3 years) in gross market lamb income.

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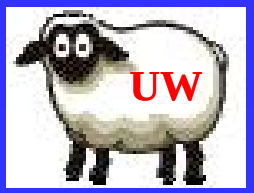
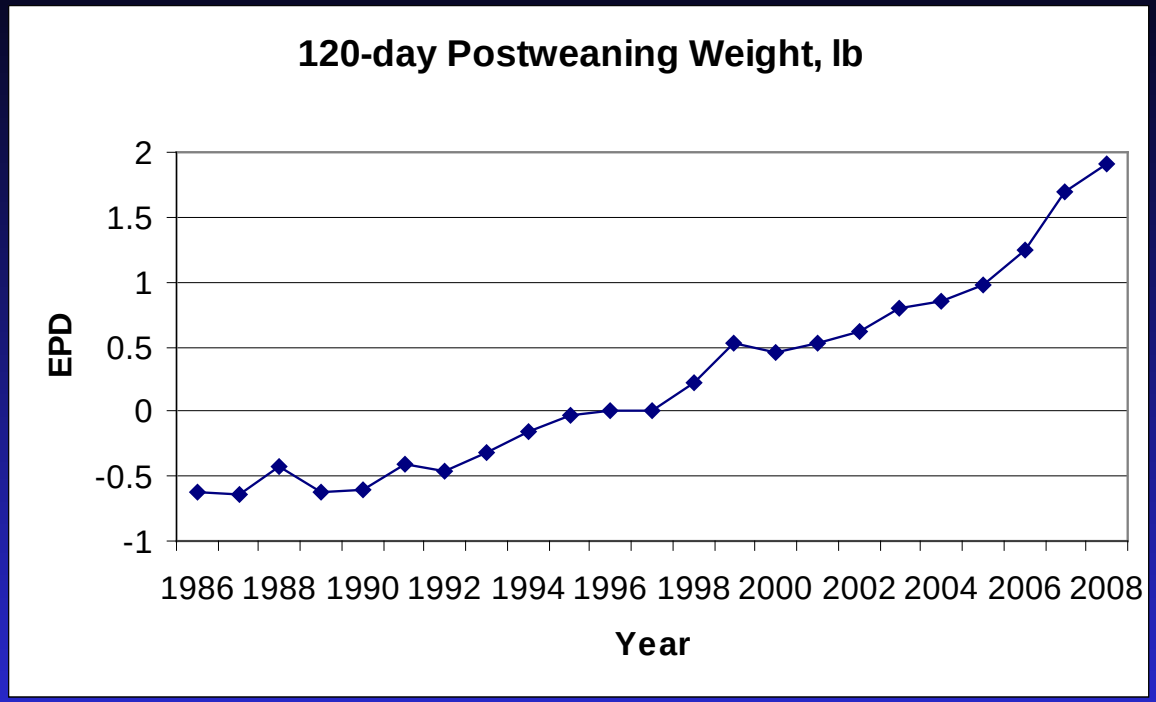


Suffolk Genetic Trend and Performance



Performance of NSIP Suffolks in 2008

Trait	Average
60-day weaning weight, lb	63.2
Postweaning average daily gain, lb/d	0.87
120-day postweaning weight, lb	116.3
Litter size	1.88

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Polypay EPD's

"Albert" WC516
Bred by West Cyclone Farm.
Among the top 25 active adult rams in 6 out of 7 traits.
Owned by West Cyclone Farm and JCC Polypays.

Wn Wt	Post Wn Wt	Milk	Milk + Growth	No. Born	No. Wn	Lb. Wn
2.9	7.2	1.9	3.3	2.8	11.8	8.1
Rank among all active adult Polypay rams in 2009:						
2nd	2nd	3rd	1st	> 200th	21st	4th

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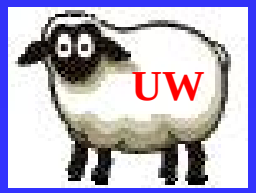

Polypay EPD's

Current EPDs for "Albert" WC516

Wn Wt	Post Wn Wt	Milk	Milk + Growth	No. Born	No. Wn	Lb. Wn
2.9	7.2	1.9	3.3	2.8	11.8	8.1

Average EPD of Active Adult Polypay Rams in 2009

Trait	Mean EPD
60-day Weaning Weight	1.11
60-day Maternal Milk	0.78
60-day Milk plus Growth	1.34
120-day Postweaning Weight	2.85
Number lambs born	4.41
Number lambs weaned	5.67
Pounds Weaned	3.36

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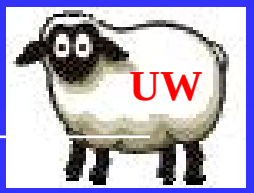

How much is a superior EPD worth?

50 commercial Polypay-sired ewes mated to a terminal sire

Lambs sold at 180 days of age as market lambs

Daughters from an average NSIP Polypay ram:

50 ewes x 1.70 lambs/ewe x 122 lb. x $1.30/lb. = $13,481

Daughters from WC516 'Albert'(6.1 more lambs weaned/100 ewes):

50 ewes x 1.76 lambs/ewe x 122 lb. x $1.30/lb. = $13,957

Expected advantage of Albert's daughters = $476/year or $1,904 over 4 lambings

Each 1.0 EPD of number weaned in a maternal sire is worth $79.33/yr in gross market lamb income of his 50 daughters.

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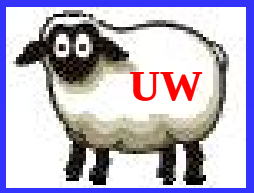
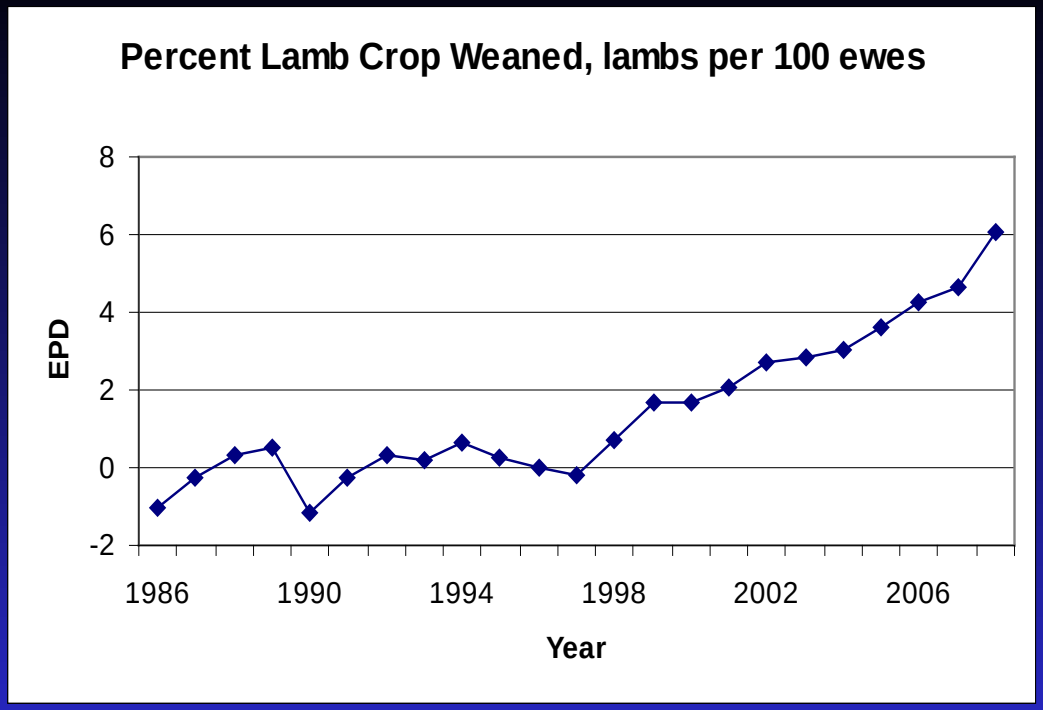


Polypay Genetic Trend and Performance



Performance of NSIP Polypays in 2008

Trait	Average
60-day weaning weight, lb	47.3
Postweaning average daily gain, lb/d	0.62
120-day postweaning weight, lb	84.8
Litter size born	2.25
Litter size weaned	1.63
Pounds weaned, lb	82.6

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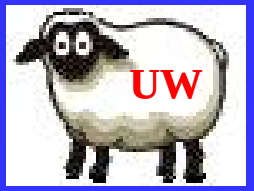

Selection on Visual Traits

Scrotum and Testes:

Scrotal circumference (cm)

	Questionable	Satisfactory	Exceptional
Ram lambs, 8-14 months	< 30	30-36	>36
Mature rams, > 14 months	< 32	32-40	>40

Defects:

1. Cryptorchidism – one or both testes not descended
2. Split scrotum
3. Testes of uneven size
4. Scar tissue in testes

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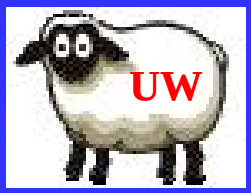
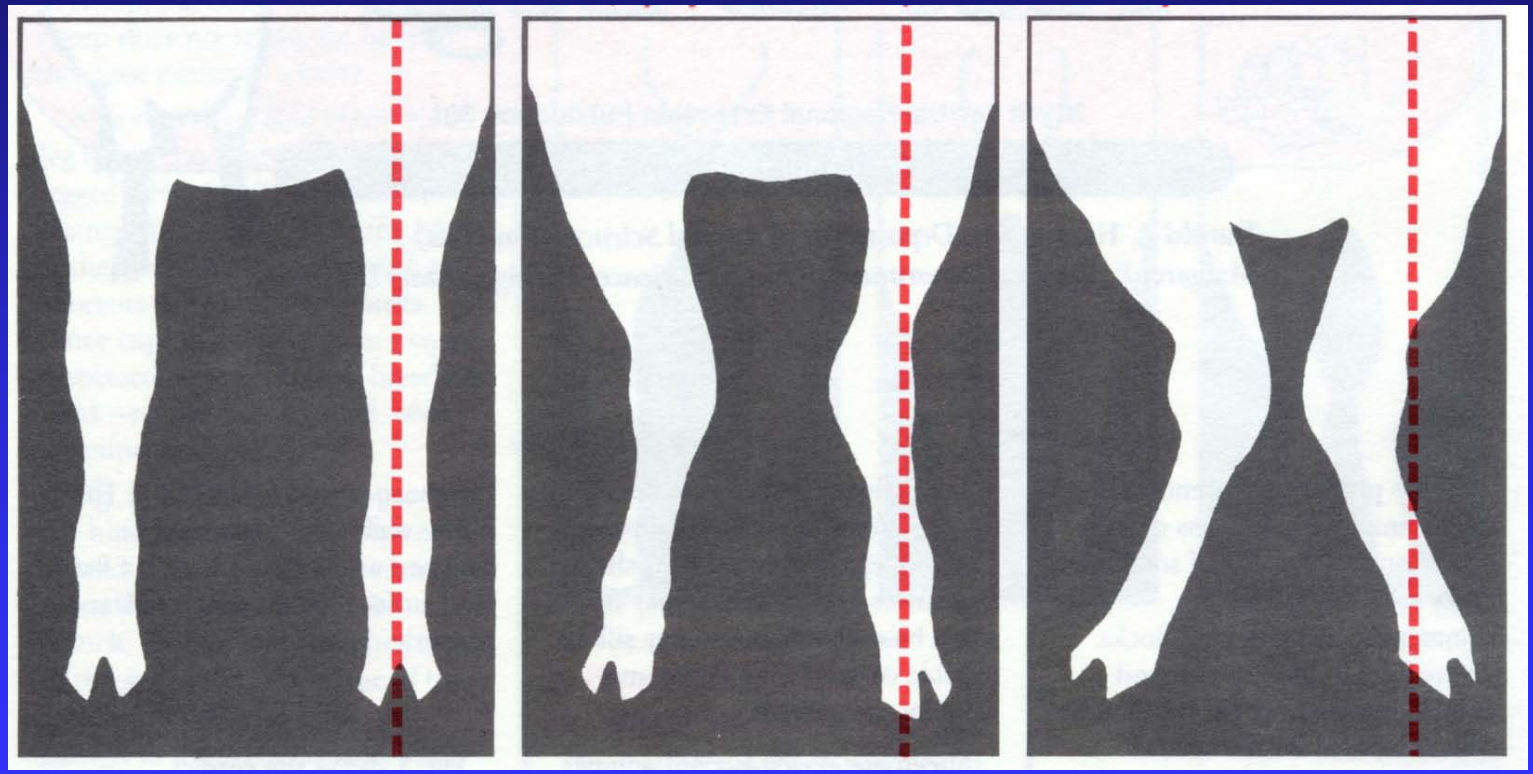


Selection on Visual Traits

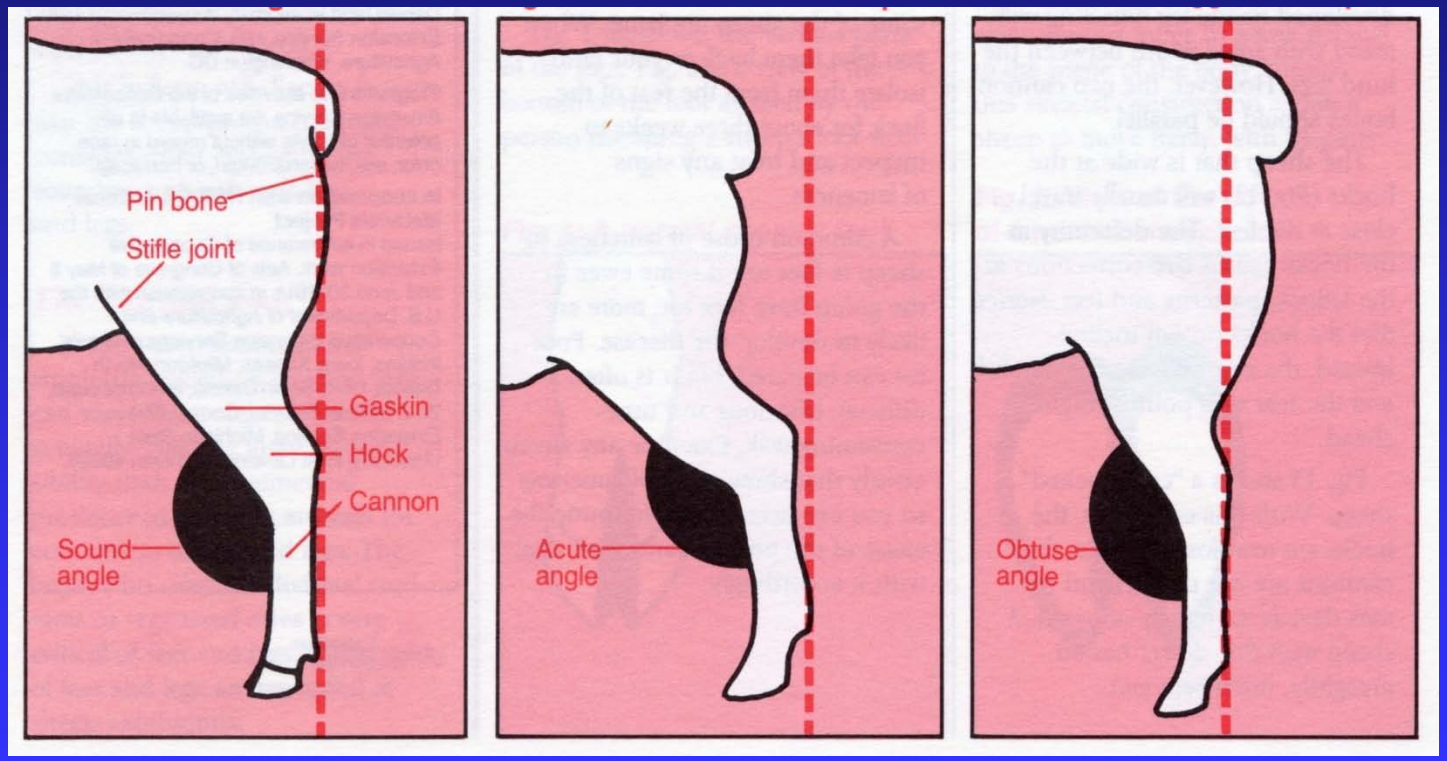
Feet and Legs – Front View:

Correct | Splay-footed | Bent-leg



Selection on Visual Traits

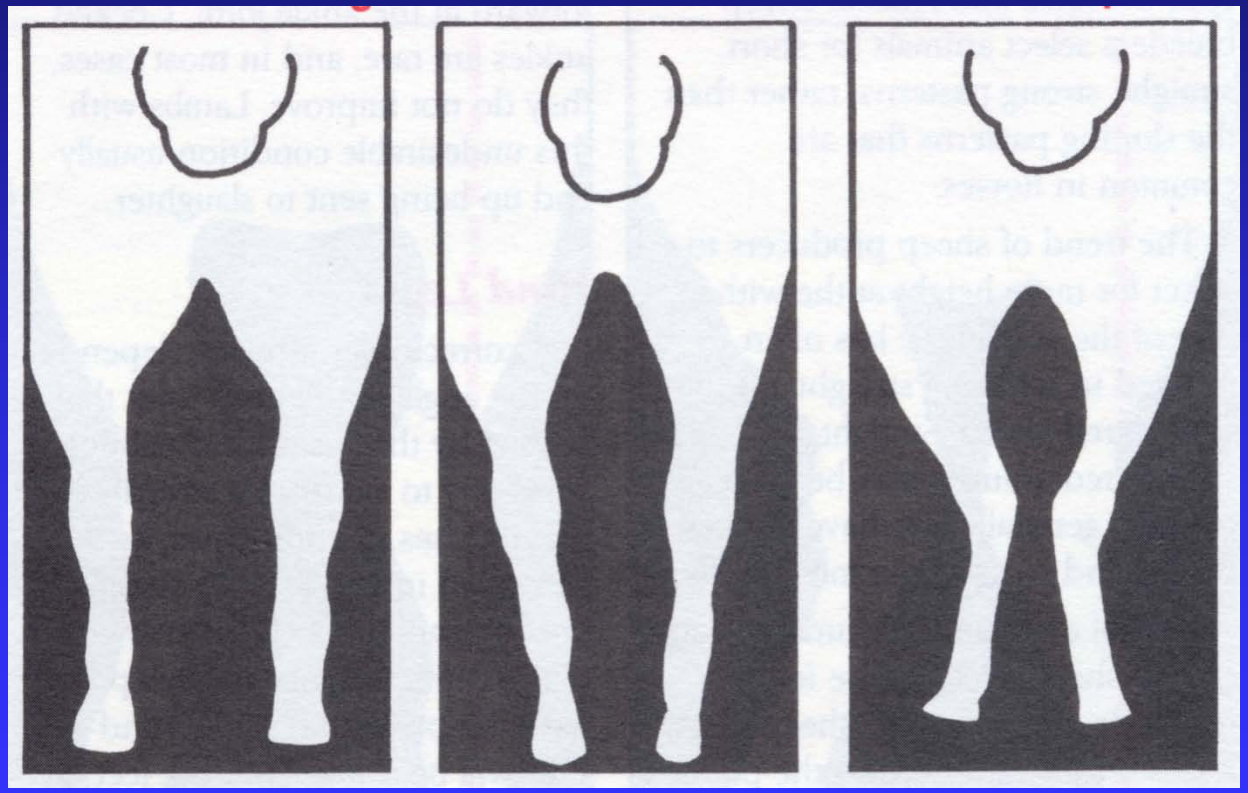
Feet and Legs – Side View:



Selection on Visual Traits

Feet and Legs – Rear View:

Correct Bow-legged Cow-hocked



Selection on Visual Traits

Mouth:

Correct – teeth come close to end of dental pad

Overshot or Parrot Mouth – teeth in back of the end of dental pad

Undershot or Monkey Mouth – teeth in front of the end of dental pad

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Selection on Visual Traits

Face and Eyes:

Correct – Open-faced, healthy eyes

Wool blind

Entropion,
inverted eyelid

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