APPENDIX IVb

REPRODUCTIVE DEFINITIONS

Wyoming Game and Fish Lab Staff: ***Tom Moore, Bill Hepworth***

I. Ovarian Structures

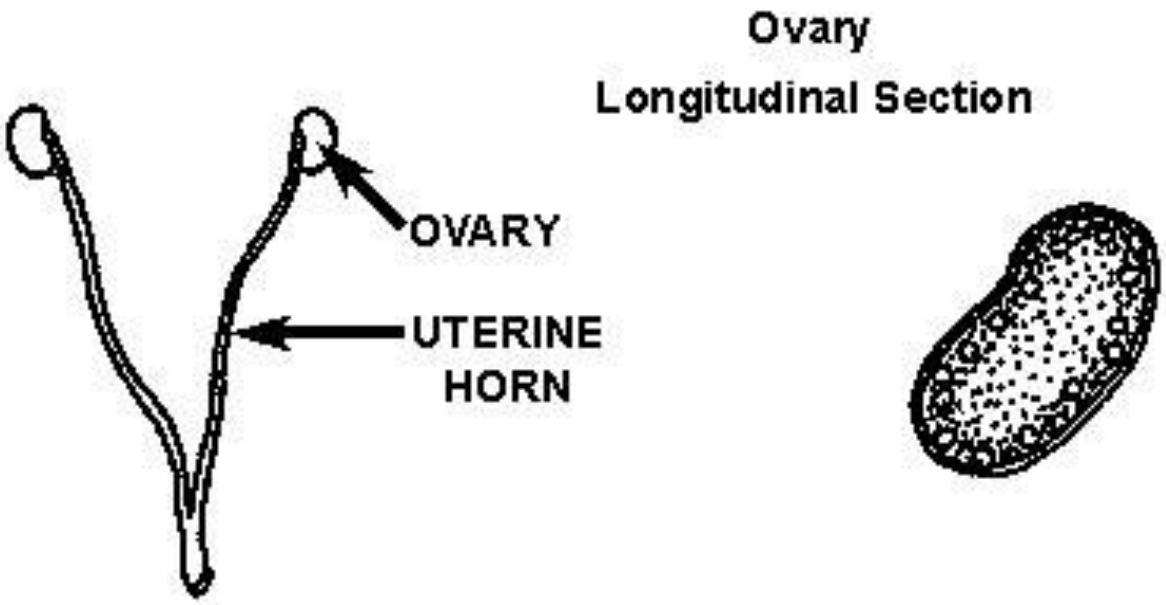
A. Corpora hemorrhagica (CH) – Appear as small blood-filled spots on the external surface of the ovary. They are present only if the animal has ovulated very recently. CH are formed at the site of each follicular rupture.

B. Corpora Lutea (CL) – These structures form in the ovary at the site of each follicular rupture. CL evolve from CH, however, unlike the CH they are not always visible on the surface of the ovary. Since they evolve from CH, their presence indicates a longer elapsed time from ovulation than is indicated by CH. The ovary must be sectioned longitudinally to determine if CL are present. CLs are generally an orange-pink color and are homogeneous in texture.

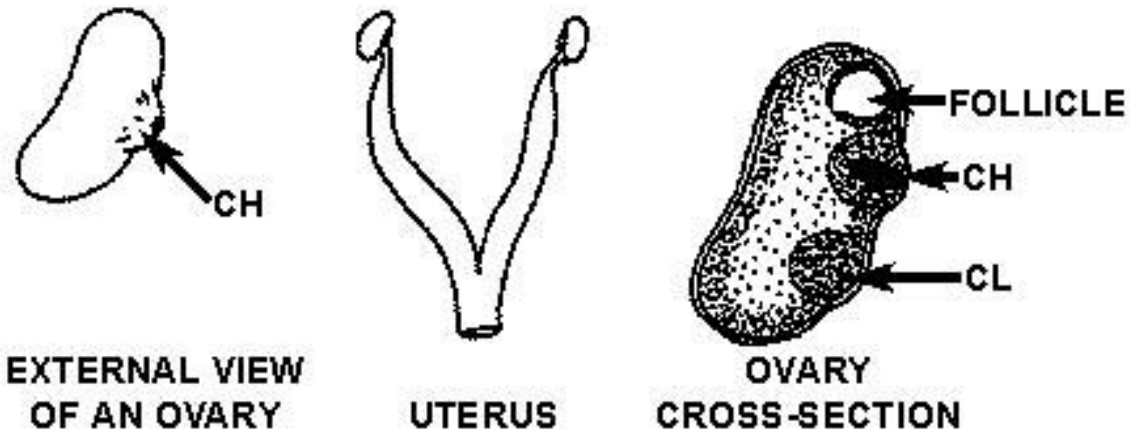
C. Follicles – are clear fluid filled sacs of varying size.

II. Uterine Condition

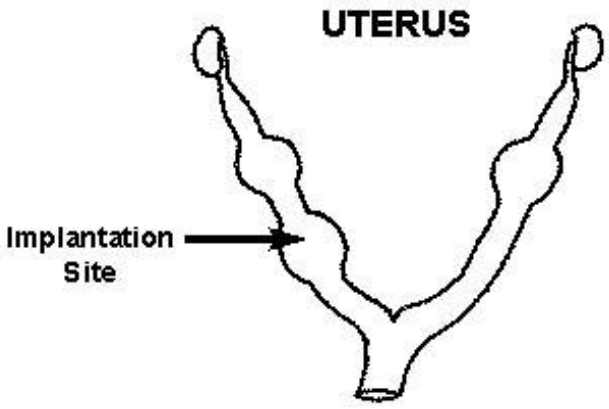
A. Anestrus – During anestrus there is no reproductive activity. The uterus is limp and collapsed in appearance. This condition is illustrated below.



B. Estrus – During estrus reproductive activity is imminent or in progress. The uterus is turgid and distended. At this time, either follicles, CH or CL may be present, depending upon the progression of the ovulation process. This condition is illustrated below:

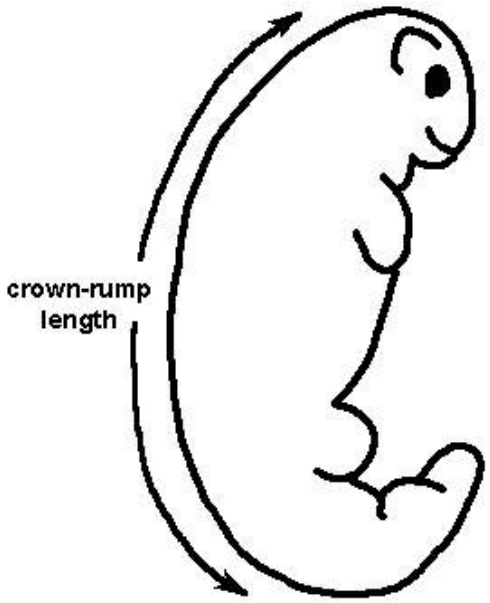


C. Pregnant – During pregnancy the uterus is very distended and turgid. Pregnant reproductive tracts cannot be identified macroscopically until the embryonic sites become pronounced. A reproductive tract in early pregnancy is illustrated below.



III. Crown-Rump Length (C-R)

A. Crown-rump length is the standard fetus measurement. The age of the fetus can be determined from this statistic. C-R is measured from the top of the head along the curvature of the back to the base of the tail.



IV. General Considerations

A. Right or left measurements always refer to animal's right or left.

B. When reproductive tracts are preserved, 75% ethanol is suitable as a "short duration" fixative (up to six weeks). For permanent fixation use "AFA" solution and prepare as follows:

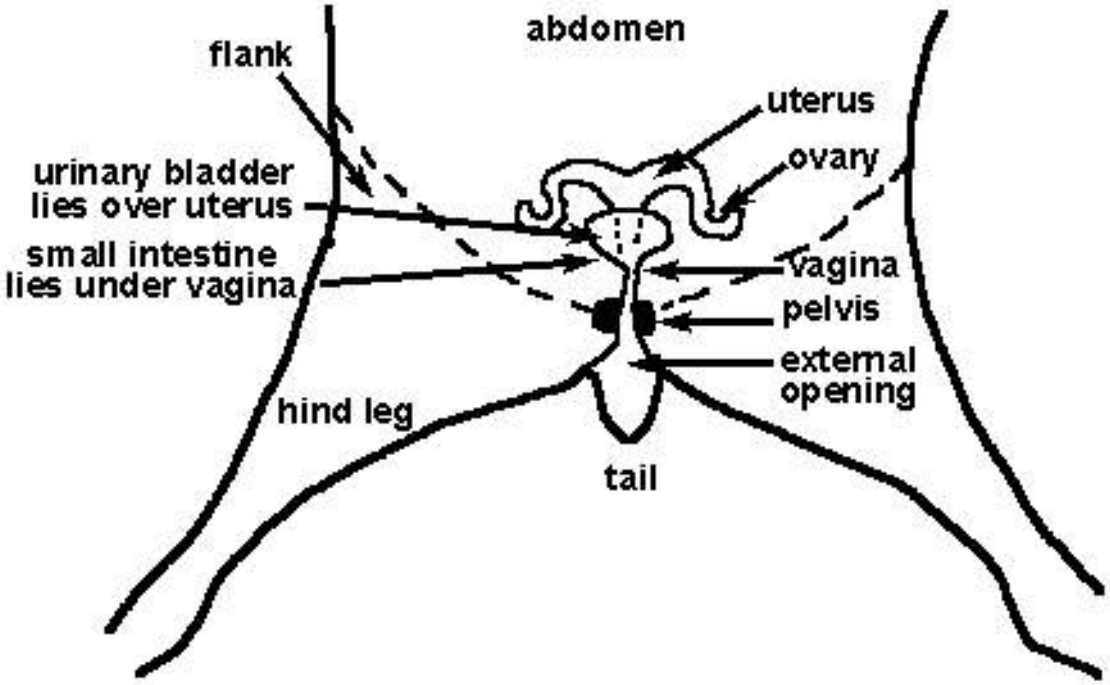
Distilled water_____ 50%
95% ethyl alcohol_____ 30%
40% formalin_____ 10%
Acetic acid_____ 10%

If these ingredients are not available, you may obtain this fixative through the Laramie Veterinary Services Laboratory.

C. When reproductive tracts are preserved, label the identifying number with pencil, as most ink is soluble in alcohol.

DIAGRAM AND INSTRUCTIONS
FOR COLLECTING

Reproductive Tract and Teeth of Female Big Game Animals



PLEASE COLLECT THE FOLLOWING ITEMS FROM YOUR DOE AND BRING THEM TO ONE OF THE CHECK STATIONS.

1. Collect the ovaries (2) and the uterus from the doe. Try To keep them in one piece. Place them in the plastic Bag you have been provided and seal it with on of the Numbered tags.
   *It is important that these organs do not dry out.

2. Be sure you have the head attached to the carcass as we will want to collect teeth and the head will also be needed for evidence of sex.

Be sure to return the plastic bag and its contents to one of the check stations.

Thank you for your cooperation.

Wyoming Game and Fish Department

FIELD COLLECTION AND POST MORTEM DATA SHEET

1.	Species	5.	Date
2.	Sex	6.	Location
3.	Age	7.	Time Collected
4.	Identification No.	8.	Collected By

9. WEIGHTS:

a.	Whole	Lbs.	j.	Lungs	g.
b.	*Hog dressed	Lbs.	k.	Heart	g.
c.	**Clean dressed	Lbs.	l.	Thyroid	g.
d.	Viscera	Lbs.	m.	Adrenals	g.
e.	Digestive tract	Lbs.	n.	Pituitary	g.
f.	Stomach (s)	Lbs.	o.	Other	
g.	Liver	Lbs.			
h.	Spleen	g.			
i.	Kidneys	g.			

* Hog dressed wt. – Eviscerated with hide, head, and legs attached.

** Clean dressed wt. – Carcass with viscera, hide, head, and legs removed at knees and hocks.

10. STOMACH CONTENTS:

a. Total wt. _____ b. Total vol. _____

11. MEASUREMENTS (in.):

a.	Total length (nose-tail tip)	f.	Horn or antler
b.	Tail length	g.	Fetus CR length & Sex a. b. c.
c.	Hind foot	h.	Fat depth – brisket -- rump
d.	Ear (notch to tip)		
e.	Shoulder muscle	i.	Other

12. GENERAL BODY CONDITION _____

13. OTHER SAMPLES COLLECTED:

a. Blood _____ e. _____
b. Fat _____ f. _____
c. Bone _____ g. _____
d. Striated muscle _____ h. _____

14. REMARKS: _____
_____
_____

Necropsy Protocol

Herd name/location _____ Animal ID (if any) _____
Location: Township _____ Range _____ Section _____ or UTM _____
WSVL Accession # _____ Date of necropsy _____
Species _____ Age _____ Sex _____
Weight "live" _____ Dressed weight _____
Hair coat quality: Excellent Good Fair Poor Very Poor
Species and number of external parasites: _____ Collected? _____

Body Muscle (0-5) _____Back fat score: 0 5 10 15
Mm fat on: Heart _____ Kidneys _____Omentum _____ Xyphoid _____
Bone Marrow Color _____ Texture _____
Internal Exam:

Species and number of internal parasites: _____Collected?_____

No. fetuses: _____ Weight: #1: _____#2: _____ Sex: #1:_____ #2:_____
Crown-Rump: #1:_____ #2: _____ Crown-nose #1: _____# 2: _____

Tissues fixed:

Heart _____
Liver _____
Spleen _____
Lung _____
Tongue _____
Muscle _____
Kidneys _____
Rumen _____
Reticulum _____
Omasum _____
Abomasum _____
Ileum _____
Gonads _____
Brain _____
Pancreas _____
Ileocecal LN _____
Bladder _____
Bone Marrow _____
Retropharyngeal LN ___

Tissues taken for laboratory evaluation:

Fecal (parasitology) _____ Abo wash _____
Blood (red tops) X 2 _____
Blood (purple tops) X 2 _____
Teeth (both I-1s) for aging _____
Others (list):

Tissues frozen:
Liver _____
Kidneys _____
Brain _____
Rumen contents _____
Muscle for DNA _____
Fat _____
Feces _____