

SEAL POSTMORTEM REPORT FORM

Interim report

NATIONAL REFERENCE NUMBER: SS2018/530

POST MORTEM NUMBER: M806/18

HISTOLOGY NUMBER:

SPECIES: Grey seal (*Halichoerus grypus*)

SEX: Male

AGE GROUP: Juvenile

DATE FOUND: 13/12/18

LOCATION FOUND: Uyea sound, Shetland

NATIONAL GRID NUMBER: HU5844099298

DATE OF POSTMORTEM: 25/01/2019

PATHOLOGIST: (redacted)

BODY CONDITION USING CONDITION CODE:

Live (becomes code 2 at death)

2a) Extremely fresh (as if just died, no bloating, meat is considered by most to be edible)

2b) Slight decomposition (slight bloating, blood imbibition visible)

3) Moderate decomposition (moderate bloating, skin peeling, penis may be extended in males, organs still intact, excluding postmortem damage)

4) Advanced decomposition (major bloating, skin peeling, penis extended in males, organs beyond recognition, bones exposed due to decomposition)

5) Indeterminate (mummified carcass or skeletal remains, no organs present)

1. MORPHOMETRIC DATA

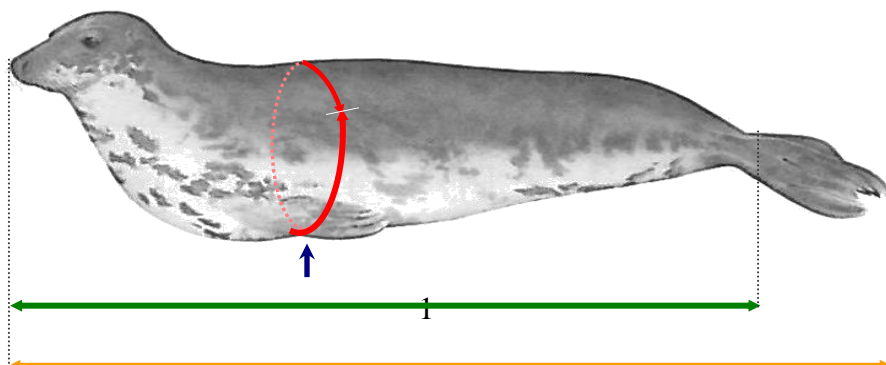
BODY CONDITION CODE: 2A

FROZEN: YES

BODY WEIGHT: 46 KG

LENGTH, GIRTH AND BLUBBER THICKNESS:

- | | |
|--|--------|
| 1) tip of nose to tip of hind flipper (1): | 134 cm |
| 2) tip of nose to end of tail (2): | 120 cm |
| 3) girth behind front flippers (3): | 83 cm |
| 4) mid-sternal blubber thickness (4): | 30 mm |



2. GROSS PATHOLOGY

NAD: No Abnormalities detected **NE:** Not Examined

1) Body condition: Good

2) External examination

Body orifices: NAD

Ectoparasites: NAD

Flippers: NAD

3) Integument

Epidermis: NAD

Blubber: NAD

Subcutaneous tissue: NAD

4) Musculoskeletal system

Skull: Fractured from ballistic trauma, cranial vault annihilated

Other bones: No other fractures detected

Back muscle mass: NAD

Other muscles: NAD

5) Nervous system

Brain: Missing!

Spinal cord: NAD

Peripheral nerves: NAD

Eyes: NAD

6) Cardiovascular system

Pericardial sac: NAD

Myocardium: NAD

Valves: NAD

Arteries, veins: NAD

7) Respiratory system

Nasal cavity: NAD

Sinuses: NAD

Trachea, bronchi: minor blood clot in proximal larynx- drained from head trauma post mortem most probably.

Lungs: No evidence of blood aspiration

Pleura/pleural cavity: NAD

8) Alimentary system

Mouth: NAD

Oesophagus: NAD

Stomach: Intact, contained 2.6kg of pink salmonid flesh and bones, most probably from fish predated in fish pen

Duodenum/small intestine: NAD

Large intestine: NAD

Anus: NAD

Liver: NAD

Pancreas: NAD

Peritoneum/peritoneal cavity: NAD

9) Urogenital system

Ovaria/testes:

Uterus: NAD

Vagina/penis: NAD

Kidneys: NAD

Adrenals: NAD

Ureters: NAD

Urinary bladder: NAD

Urethra: NAD

10) Lymphatic and endocrine systems

Thyroid: NAD

Spleen: NAD

Thymus: NAD

Lymph nodes: NAD No significant enlargement

3. CHECKLIST OF STANDARD SAMPLES

In each square, enter:

X = sample taken

Blank = sample not taken or not present

Record any extra samples taken in section 4.

Weights

left testis (g):
right testis (g):
heart (g):

Freeze at -20°C

epidermis 4 cm²
 blubber 2 x 20g
 liver 2 x 20g
 muscle 2 x 20g
 serum or PCF to 20 ml
 teeth >4
 whiskers >4
 urine up to 10 ml
 faecal material up to 50 ml
 scapula whole
 skull whole

Bacteriology

brain swab/block
 CSF swab/fluid
 kidney swab/block
 liver swab/block
 lung swab/block
 spleen swab/block

Virology (freeze at -80°C)

brain 1 cm³
 spleen 1 cm³
 lung 1 cm³
 brain (RNAlater) 0.5 cm³
 spleen (RNAlater) 0.5 cm³
 lung (RNAlater) 0.5 cm³

10% Formalin

adrenal glands both
 bladder 1 cm³
 brain whole
 heart 1 cm³
 kidney 1 cm³
 liver 1 cm³
 lung 1 cm³ x ...
 mammary gland 1 cm slice
 mesenteric ln. 1 cm slice
 pancreas 1 cm³
 bronchial ln. 1 cm slice
 skin and blubber 1 cm³
 spinal cord 1 cm³
 spleen 1 cm³
 testes both/slices
 thymus 1 cm³
 thyroid 1 cm³
 uterus 1 cm³
 ovaries both

Ethanol

Parasites from
-
-

4. STOMACH CONTENTS

Food remains cardiac section stomach (g)2600:

No food remains

Stomach contents were:

Sieved stomach contents through a 425 micron mesh and store in ethanol?

Stomach contents frozen directly ay -20C

Entire Stomach frozen directly ay -20OC

5. OTHER SAMPLES COLLECTED

| Extra samples for histological examination: | Extra samples for bacteriological examination: | Other extra samples taken (list): liver viro |
|---|--|---|
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

Optional (if time and storage allows)

Freeze at -20°C

- foetus/placenta whole
- milk up to 20 ml
- claws 2 – 3

Virology (freeze at -80°C) or RNAlater (freeze at -20°C)

- pituitary section
- cranial nerve section

Fixed tissue

- pituitary whole

6. BACTERIOLOGY REPORT

Not taken

7. HISTOPATHOLOGY REPORT

Not taken

8. OBSERVATIONS/COMMENTS:

This juvenile grey seal was shot under special licence as it has entered a salmon sea pen on a Shetland fish farm. The projectile had entered the right temporal region and obliterated the cranial vault. There was no evidence of a second shot and the visceral organs were all intact. The animal was otherwise grossly unremarkable, in good body condition with low parasite burden and appeared to have been healthy prior to killing. The stomach contained 2.6kg of fish digesta, comprising several fish skeletons with pink flesh. No fish heads were detectable. It would appear in this case that the animal was killed appropriately, with death being almost instantaneous from a single shot to the head. The large volume of ingesta resembling salmonid flesh would support the allegation that this animal was preying on farmed fish.

- a. **Significant diseases or conditions thought to contribute to the death of the animal: Shot (known)**

- b. **Incidental diseases or conditions not thought to contribute to the death or condition causing it**

9. DIAGNOSIS: SHOT (KNOWN)

10. CAUSE OF DEATH: SHOT UNDER LICENCE (SHOT KNOWN)

11. CAUSE OF DEATH CATEGORY: PHYSICAL TRAUMA, SHOT (KNOWN)

12. CAUSE OF DEATH CLASS: TRAUMA

13. CONFIDENCE IN DIAGNOSIS: 5

Inverness
Scotland

Report last modified by 09/02/2021 11:24 by (redacted)