

From: **Ramsay, Edward Charles** <[eramsay@utk.edu](mailto:eramsay@utk.edu)>  
Date: Wed, Sep 26, 2018 at 7:43 AM  
Subject: [EXTERNAL] Fw: Lab Results for [28-99-03] BEAR 09/16/18 ~ GREAT SMOKY MTN NTL PA  
To: Bill Stiver <[bill\\_stiver@nps.gov](mailto:bill_stiver@nps.gov)>  
Cc: Craig, Linden E <[linden@utk.edu](mailto:linden@utk.edu)>

Bill, here is the final report on this bear. There really wasn't any evidence that this bear had 'anything wrong with it.'

As always, let me know if you or others at the park have any questions, Ed

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"Most people don't realize that large pieces of coral, which have been painted brown and attached to the skull with common wood screws, can make a child look like a deer." Jack Handey

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**From:** [WWAVTHCOMMUNICATION@OTRS.VET.UTK.EDU](mailto:WWAVTHCOMMUNICATION@OTRS.VET.UTK.EDU) <[WWAVTHCOMMUNICATION@OTRS.VET.UTK.EDU](mailto:WWAVTHCOMMUNICATION@OTRS.VET.UTK.EDU)>

**Sent:** Tuesday, September 25, 2018 6:00 PM

**To:** Raho, Dane Michael; Morandi, Federica; [WWAVTHCOMMUNICATION@OTRS.VET.UTK.EDU](mailto:WWAVTHCOMMUNICATION@OTRS.VET.UTK.EDU); Ramsay, Edward Charles; Craig, Linden E

**Subject:** Lab Results for [28-99-03] BEAR 09/16/18 ~ GREAT SMOKY MTN NTL PA

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Clinic Patient Info                      Referral Clinic Info  
Pat.ID: 28-99-03  
Name: BEAR 09/16/18  
Owner: GREAT SMOKY MTN NTL PARK  
OTH LA    UNKNOWN  
BEAR  
Age when Acc'ned: 6 Years(Died: 09/16/2018) Clinic Phone:  
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---- FINAL NECROPSY REPORT ----

Date Died: Sep 16, 2018                      Necropsy Date: SEP 16, 2018@13:27  
Pathologist: LINDEN CRAIG                      Clinician: ED RAMSAY  
Resident: LINDEN CRAIG                      Accession: NE 18 1485  
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CLINICAL HISTORY  
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Found guarding a man's body last Tuesday (11th)and immobilized, collared, sampled, and released. Decision was made to collect bear and it was shot this morning (16th).

DIFFERENTIAL DIAGNOSIS  
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Open

QUESTIONS/REQUESTS  
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Please screen for potential underlying pathology that might have caused bear to attack the man (while he was alive). Please save any possible human remains.

Clinic number: 289903  
Pathology number: 18-1485  
Necropsy date and time: September 16, 2018, 2pm  
Death date and time: September 16, 2018, morning (time not specified)  
Postmortem interval: 5 hours  
Degree of autolysis: moderate  
Body condition score: 2 out of 5  
Breed and color: black bear  
Clinical history: found scavenging human remains 5 days ago; sedated, collared, and released at that time; recaptured and euthanized today; shot 4 times today, possibly shot once 5 days ago  
Died or euthanized? Euthanized (by gunshot)  
Student: none  
Resident: Raho  
Pathologist: Craig  
Species: Ursus americanus  
Sex: male intact

Weight: 70.4kg

Age: 3 years (estimated)

Left pinna: green ear tag BSMNP; red ear tag ?do not eat before 10-25-18?

Right pinna: green ear tag 1104

Many maggots throughout hair coat

Multiple fresh penetrating bullet wounds:

1. Left cranial and dorsal chest wall: 1.5cm diameter; communicates with hole through fractured 9th rib, left caudal lung lobe, mediastinum and aorta, right cranial lung lobe, hole between right 2nd and 3rd rib; , fractured right proximal humerus, 2cm diameter metal bullet with packing material in right shoulder area
2. Base of right ear: 2cm diameter skin defect, continuous with fracture of left occipital condyle and 2.5x1cm hemorrhage ventral to left side of pons
3. Dorsal neck: 3cm diameter skin defect, hemorrhage extending to left temporalis muscle, 2cm diameter metal bullet on surface of skull
4. Lateral left stifle: 1.5cm diameter, bloody track up medial leg; bullet fragment in left inguinal area

One older wound: right shoulder, 4x5.5cm, extends into muscle, but not to bone, filled with maggots, edges are gray and rounded (granulation tissue), no bullet or bullet fragments at this site

Bone marrow: pink red and sinks in water

Thorax and pluck:

No negative pressure in the thorax

1150ml of partially clotted blood in thorax

Heart weight: 420g

Heart percentage of body weight: 0.6%

Lungs float: yes

Scant brown stringy gelatinous material within trachea and bronchi

Abdomen:

Liver weight: 1.38kg

Liver percentage of body weight: 2%

1cm diameter focus of pale tan hepatic parenchyma at fibrous attachment near hilus

Bile duct patent: yes

Stomach full of and distended by white-yellow firm crumbly material (acorn meat)

2 nematodes in jejunum (20cm long and 12cm long)

Right adrenal cortex has minimal 1-2mm foci of cortical hemorrhage

Head:

Teeth are in good condition

Gross Diagnoses:

Right shoulder: Moderate chronic skin wound with granulation tissue

Multiple sites: Acute gunshot wounds with hemothorax  
Mild intestinal nematode parasitism

Microscopic Findings:

Slide 1: Brain (rostral cerebrum): No significant findings (NSF)

Slide 2: Brain (internal capsule and basal nuclei): NSF

Slide 3: Brain (thalamus and hippocampus): NSF

Pituitary gland: NSF

Slide 4: Brain (cerebellum and pons): NSF

Slide 5: Brain (midbrain): NSF

Brain (ventral occipital cerebrum): There is multifocal acute hemorrhage disrupting the cortical gray matter.

Slide 6: Liver: There are a few small random aggregates of lymphocytes with fewer eosinophils. There is a subcapsular focus of hepatocellular lipid accumulation; the overlying capsule has a collagenous attachment (tension lipodosis).

Adrenal gland: NSF

Bone marrow: Hematopoietic cellularity is 40% with all cell line represented. The myeloid to erythroid ratio is high (10:1). There is moderate serous atrophy of fat.

Slide 7: Kidney: NSF

Tongue: There is mild lymphocytic inflammation within the papillae.

Slide 8: Heart (left ventricular free wall with papillary muscle): NSF

Diaphragm: NSF

Slide 9: Stomach (fundus): The outer circular muscular tunic contains some skeletal muscle.

Prostate: NSF

Slide 10: Lung: There is regionally extensive acute hemorrhage.

Slide 11: Lymph node (right axillary): The lymph node is normal. There is acute hemorrhage in the surrounding tissue.

Tracheal contents: This is a mixture of blood and mucus with bacterial overgrowth.

Slide 12: Pancreas: NSF

Skin wound (left shoulder): There is moderate muscle degeneration.

Microscopic Diagnoses

Brain: Mild multifocal acute hemorrhage

Lung: Moderate regionally extensive acute hemorrhage

Mild multifocal chronic eosinophilic hepatitis

Bone marrow: Moderate serous atrophy of fat

Mild multifocal chronic glossitis

Ancillary tests:

Parasite identification: Baylisascaris transfuga

Fecal floatation: Baylisascaris transfuga eggs

Rabies immunohistochemistry:

Six blocks of formalin-fixed paraffin-embedded brain were sent to University of Minnesota

Accession number: D18-036318

All sections were negative for rabies virus immunohistochemistry.

Final diagnosis

Euthanasia by gunshot

Comments:

There are no lesions to explain the thin body condition or abnormal behavior of this bear.

/es/ Linden E. Craig, DVM, PhD, DACVP

Anatomic Pathologist

Signed SEP 25, 2018@16:45:01

:lec

Date: SEP 25, 2018

\*\* END \*\*

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