

# Summary of Diseases Affecting Michigan Wildlife 2014

## ABNORMAL WEAR PATTERN (HOOF)

White-tailed Deer

## ABSCESS

Articular

White-tailed Deer, Bald Eagle

Cranial

White-tailed Deer

Cuticular

Bald Eagle

Diaphragmatic

White-tailed Deer

Gonadal

White-tailed Deer

Hepatic

White-tailed Deer, Great Blue Heron

Intestinal

White-tailed Deer

Muscular

White-tailed Deer, Cottontail Rabbit, Bald Eagle, Common Loon

Pulmonary

Pleural

Multiple

White-tailed Deer

Unspecified

White-tailed Deer

Skeletal (Sinus)

White-tailed Deer, Bald Eagle

Subcutaneous

White-tailed Deer, Bald Eagle, Common Loon

**ABSCESS** (*continued*)

Tracheal  
Red-winged Blackbird

Unspecified  
White-tailed Deer

**ACTINOMYCOSIS**

White-tailed Deer

**AIRSACCULITIS**

Bacterial  
Great Blue Heron

Fibrinous  
Chronic  
Trumpeter Swan

Ingesta  
Canada Goose

Mycotic  
Bald Eagle, Trumpeter Swan, Common Loon, Ring-billed Gull

Necrotic  
Caseous  
Chronic  
Common Loon, American Coot

Unspecified  
Chronic  
Common Loon, Greater Scaup, American Crow

Unspecified  
Great Blue Heron

**ALVEOLITIS**

Histiocytic  
Diffuse  
Moderate  
Striped Skunk

**ANTHRACOSIS**

Pulmonary  
Moderate to Severe  
Great Horned Owl

**ARTHRITIS**

Necrotic

Chronic

Red-tailed Hawk

**ASCITES**

White-tailed Deer

**ASPERGILLOSIS**

Pulmonary (Ingesta)

Canada Goose

Unspecified

Bald Eagle, Red-tailed Hawk, Trumpeter Swan, Common Loon, Mallard, Ring-billed Gull, American Crow

**ATELECTASIS**

Pulmonary

Mild

Raccoon

**BOTULISM**

Type C

Mallard

**BRONCHOPNEUMONIA**

Bacterial

Necrosuppurative

White-tailed Deer

Unspecified

White-tailed Deer

**CANAL**

Cerebrospinal

Dilated

Red-tailed Hawk

**CATARACTS**

Mature

Bilateral

American Kestrel

Unspecified

Bilateral

White-tailed Deer

## **CESTODIASIS**

Intestinal

*Echinococcus granulosus*

Gray Wolf

## **CHOLEHEPATITIS**

Suppurative

Severe

White-tailed Deer

## **CONGESTION**

Hepatic

White-tailed Deer, Red-tailed Hawk

Nephritic

White-tailed Deer, Wild Turkey

Pulmonary

White-tailed Deer, Gray Wolf, Coyote, Gray Fox, Striped Skunk, Raccoon, Woodchuck, Cottontail Rabbit, Eastern Fox Squirrel, Eastern Gray Squirrel, Big Brown Bat, Little Brown Bat, Northern Long-eared Bat, Bald Eagle, Osprey, Red-tailed Hawk, Broad-winged Hawk, Cooper's Hawk, Turkey Vulture, Great Horned Owl, Snowy Owl, Screech Owl, Trumpeter Swan, Mute Swan, Canada Goose, Common Loon, Red-breasted Merganser, Common Merganser, White-winged Scoter, Canvasback, Ring-necked Duck, Greater Scaup, Lesser Scaup, Common Goldeneye, Ruddy Duck, Long-tailed Duck, Mallard, Gadwall, Horned Grebe, American Coot, Herring Gull, Ring-billed Gull, Great Blue Heron, Wild Turkey, Mourning Dove, American Crow, Pileated Woodpecker, Common Grackle, Gray Catbird, American Robin, Baltimore Oriole, Red-winged Blackbird, Yellow-Rumped Warbler, Snapping Turtle, Map Turtle, Painted Turtle, Spiny Softshell Turtle, Eastern Massasauga Rattlesnake

Splenic

Great Horned Owl, Red-tailed Hawk, Snapping Turtle, White-tailed Deer

## **CONJUNCTIVITIS**

Lympho-plasmacytic (Bacterial-possibly *Mycoplasma* sp.)

Moderate to Severe

American Goldfinch

Unspecified

Chronic

Blue Jay

## **CONSOLIDATION**

Pulmonary  
White-tailed Deer

## **CONTAMINATION**

Oil (Plumage)  
Canada Goose

## **CYST**

Ovarian  
Epithelial  
White-tailed Deer

Renal  
White-tailed Deer

## **CYSTICERCOSIS**

Hepatic  
*Taenia hydatigena*  
White-tailed Deer

Pulmonary  
*Echinococcus granulosus*  
White-tailed Deer

## **DEHYDRATION**

Gray Wolf, White-tailed Deer, Long-tailed Weasel, Cottontail Rabbit, Eastern Fox Squirrel, Eastern Gray Squirrel, Bald Eagle, Osprey, Red-tailed Hawk, Broad-winged Hawk, Cooper's Hawk, Merlin, Turkey Vulture, Great Horned Owl, Barred Owl, Long-eared Owl, Trumpeter Swan, Canvasback, Ring-necked Duck, Herring Gull, Great Blue Heron, Wild Turkey, Common Raven, Blue Jay

## **DERMATITIS**

Bacterial (Staphylococcus sp.)  
Wild Turkey

Granulomatous  
Multifocal  
Moderate  
White-tailed Deer

## **DIFFICULTIES**

Hatching  
Common Loon (Egg)

Parturition (Retained Fetuses)  
White-tailed Deer

## **DISCOHESION**

Hepatocyte

Severe

Diffuse

White-tailed Deer

## **DISTEMPER**

Canine

Coyote, Gray Fox, Raccoon

## **DROWNING**

Bald Eagle, Cooper's Hawk, Greater Scaup

Possible Drowning

Bald Eagle, Red-tailed Hawk, Mute Swan, Common Loon, White-winged Scoter, Red-breasted Merganser, Common Merganser, Canvasback, Redhead, Ring-necked Duck, Greater Scaup, Lesser Scaup, Common Goldeneye, Ruddy Duck, Long-tailed Duck, Mallard, Gadwall, Horned Grebe, American Coot, American Bittern, Eastern Massasauga Rattlesnake

## **EDEMA**

Pulmonary

White-tailed Deer, Gray Wolf, Coyote, Gray Fox, Raccoon, Striped Skunk, Woodchuck, Cottontail Rabbit, Eastern Fox Squirrel, Eastern Gray Squirrel, Big Brown Bat, Little Brown Bat, Bald Eagle, Osprey, Red-tailed Hawk, Cooper's Hawk, Sharp-shinned Hawk, Turkey Vulture, Great Horned Owl, Snowy Owl, Barred Owl, Screech Owl, Trumpeter Swan, Mute Swan, Canada Goose, Common Loon, White-winged Scoter, Red-breasted Merganser, Common Merganser, Canvasback, Redhead, Ring-necked Duck, Greater Scaup, Lesser Scaup, Common Goldeneye, Ruddy Duck, Long-tailed Duck, Mallard, Gadwall, Horned Grebe, American Coot, Herring Gull, Ring-billed Gull, American Bittern, Ruffed Grouse, Mourning Dove, American Crow, Pileated Woodpecker, Common Grackle, Gray Catbird, American Robin, Red-winged Blackbird, Map Turtle, Spiny Softshell Turtle

Subcutaneous

Hemorrhagic

White-tailed Deer

## **EGG**

Fertile (1 the embryo died after 6 days of incubation)

Peregrine Falcon

Infertile

Peregrine Falcon, Common Loon

## **ELECTROCUTION**

Electric wires in tree

Common Grackle, Baltimore Oriole, Rose-breasted Grosbeak

Power line

Bald Eagle, Red-shouldered Hawk, Great Horned Owl, Trumpeter Swan,

Transformer

Bald Eagle

## **ENCEPHALITIS**

Parasitic

Focal

Eastern Fox Squirrel

Perivascular

Eosinophilic

Focal

Raccoon

Suppurative

White-tailed Deer

Viral

White-tailed Deer

## **ENTERITIS**

Bacterial

Hemorrhagic

White-tailed Deer

Lympho-plasmacytic

Mild

Long-tailed Duck

Necrotic

Hemorrhagic

Long-tailed Duck

Parvoviral

Raccoon

Suppurative (Caseous Necrotic)

Chronic

European Starling

**ENTERITIS** (*continued*)

Ulcerative

Hemorrhagic

Verminous

Redhead

Unspecified

Hemorrhagic

White-tailed Deer, Great Blue Heron

**ENTEROTOXEMIA**

Bacterial

White-tailed Deer

**EPICARDITIS**

Fibrinous

Chronic

White-tailed Deer

Necrotic

Chronic

Red-tailed Hawk

**EXPOSURE**

White-tailed Deer, Big Brown Bat, House Sparrow

**FAILURE**

Renal

Cottontail Rabbit

**FASCIOLOIDIASIS**

White-tailed Deer

**FIBROSIS**

Cardiac

Interstitial

Multifocal

Bald Eagle

Hepatic

Chronic

White-tailed Deer

## **GLOMERULONEPHRITIS**

Membranous

Severe

White-tailed Deer, Cottontail Rabbit

Periportal

Moderate

Bald Eagle

## **GOUT**

Visceral

Screech Owl

## **HEMORRHAGES**

Agonal

White-tailed Deer

## **HEMOSIDEROSIS**

Hepatic

Great Horned Owl, European Starling

Splenic

Moderate

Gray Fox

Unspecified

Great Horned Owl

## **HEMOTHORAX**

White-tailed Deer

## **HEPATITIS**

Bacterial

Mute Swan

Bacterial or Viral (Probable)

Trumpeter Swan

Mild

Lesser Scaup

**HEPATITIS** (*continued*)

Necrotic

Caseous

Chronic

American Coot

Fibrinous

Chronic

Great Blue Heron

Necrotizing

Acute

Trumpeter Swan

Multifocal

Raccoon

Multifocal (Bacterial)

Lesser Scaup

Periportal

Moderate

Bald Eagle

Moderate (Bacterial)

Great Horned Owl

**HERNIA**

Diaphragmatic

White-tailed Deer, Eastern Fox Squirrel

**HYPERPLASIA**

Melanomacrophage

Hepatic

Map Turtle, Painted Turtle, Spiny Softshell Turtle

**IMBALANCE**

Electrolyte

White-tailed Deer

**INCUBATION**

Insufficient

Common Loon (Egg)

**INFARCT**

Renal

White-tailed Deer

## **INFECTION**

### Bacterial

Red-tailed Hawk, Canada Goose

### Bacterial (Probable *Staphylococcus* sp.)

Red-tailed Hawk, Wild Turkey, Ruffed Grouse, Mourning Dove, House Finch

### Fungal

Canada Goose

## **INFESTATION**

### Louse

#### Chewing

*Trichodectes canis*

Coyote

#### Sucking

Unidentified Species

Eastern Fox Squirrel

#### Unspecified

White-tailed Deer

### Tick

*Dermacentor variabilis*

Gray Wolf

*Ixodes scapularis*

Gray Wolf

*Ixodes* sp.

White-tailed Deer

## **LAMINITIS** (the result of recovering from an EHD infection)

White-tailed Deer

## **LIPIDOSIS**

### Hepatic

#### Severe

Opossum

## **LIVER**

### Polycystic

White-tailed Deer

## **LYMPHOPROLIFERATIVE DISEASE**

Wild Turkey

## **MALACIA**

Red-tailed Hawk

## **MALNUTRITION**

Elk, White-tailed Deer, Gray Wolf, Red Fox, Gray Fox, Bobcat, Long-tailed Weasel, Raccoon, Opossum, Eastern Fox Squirrel, Eastern Gray Squirrel, Big Brown Bat, Bald Eagle, Osprey, Red-tailed Hawk, Broad-winged Hawk, Cooper's Hawk, American Kestrel, Great Horned Owl, Snowy Owl, Long-eared Owl, Screech Owl, Trumpeter Swan, Common Loon, Canada Goose, Red-breasted Merganser, Lesser Scaup, Common Goldeneye, Herring Gull, Ring-billed Gull, Great Blue Heron, Wild Turkey, Mourning Dove, Pileated Woodpecker, Common Raven, American Crow, Blue Jay, American Robin, European Starling, Map Turtle, Painted Turtle, Spiny Softshell Turtle, Eastern Massasauga Rattlesnake

## **MANGE**

Sarcoptic

Gray Wolf, Red Fox

Sarcoptic (Old)

Gray Wolf, Coyote

## **MENINGITIS**

Lymphoplasmacytic

Moderate

White-tailed Deer

Suppurative

White-tailed Deer

## **MENINGOENCEPHALITIS**

Bacterial

White-tailed Deer

Suppurative

Focal

White-tailed Deer

Unspecified

White-tailed Deer

**METRITIS**

Suppurative  
Chronic  
White-tailed Deer

Unspecified  
Domestic Dog

**MINERALIZATION**

Renal Medullary Tubular and Collecting Duct  
Moderate  
Striped Skunk

**MYCOPLASMOSIS**

House Finch

**MYIASIS**

Bald Eagle, Red-tailed Hawk, Cooper's Hawk, Great Blue Heron, Common Grackle

**MYOCARDITIS**

Granulomatous  
Multifocal  
Mild  
Bald Eagle

Necrotic  
Chronic  
Yellow-Rumped Warbler

**MYOPATHY**

Degenerative  
Bobcat

**NECROSIS**

Hepatocyte  
Severe  
Diffuse  
White-tailed Deer

Hepatic  
Multifocal  
Raccoon

Nephritic  
Multifocal  
Raccoon

**NECROSIS** (*continued*)

Splenic

Multifocal

Raccoon

**NEMATODIASIS**

Cardial

*Dirofilaria immitis*

Gray Wolf, Coyote

Cerebrospinal

*Parelaphostrongylus tenuis*

Elk, White-tailed Deer

Unidentified Species

Raccoon

Pulmonary

Unidentified Species

Mink, Opossum

Subcutaneous

*Dracunculus* sp.

Mink

**NEPHRITIS**

Caseogranulomatous (Bacterial)

Multifocal

Trumpeter Swan

Interstitial

Bacterial

Multifocal

Painted Turtle

Necrotizing

Multifocal

White-tailed Deer

Unspecified

Chronic

Cottontail Rabbit

Moderate

White-tailed Deer

**PARVOVIRUS**

Raccoon

**PERICARDITIS**

Fibrinous

Chronic

White-tailed Deer, Trumpeter Swan

Unspecified

White-tailed Deer

Necrotic

Chronic

Red-tailed Hawk, Yellow-Rumped Warbler

Suppurative

Chronic

White-tailed Deer

Unspecified

Chronic

Bald Eagle

**PERIFOLLICULITIS**

Lympho-plasmacytic

Mild

White-tailed Deer

**PERITONITIS**

Fibrinous

Chronic

White-tailed Deer, Great Blue Heron

Nephritic

Eastern Fox Squirrel

Suppurative

Chronic

White-tailed Deer, European Starling

Verminous (Eustrongylidosis)

Great Blue Heron

## **PLEURITIS**

Bacterial

White-tailed Deer

Fibrinous

Chronic

White-tailed Deer, Raccoon

Fibrous

Chronic

White-tailed Deer

Hepatic

Eastern Fox Squirrel

## **PLEXITIS**

Choroid

Lympho-plasmacytic

Nodular

Elk

## **PNEUMONIA**

Aspiration

White-tailed Deer

Bacterial

Gray Wolf, Big Brown Bat, Little Brown Bat

Fibrinous

Chronic

White-tailed Deer

Interstitial

Lympho-plasmacytic

Mild

Gray Fox, Woodchuck

Mild

Striped Skunk, Raccoon

Moderate

Raccoon

Nonsuppurative

Moderate

Striped Skunk

**PNEUMONIA** (*continued*)

Interstitial (*continued*)

Unspecified

Raccoon, Eastern Fox Squirrel

Mild

Big Brown Bat

Pyogranulomatous

Locally Extensive

Severe

White-tailed Deer

Suppurative

Chronic

White-tailed Deer

Unspecified

White-tailed Deer, Eastern Gray Squirrel, Big Brown Bat, Common Loon,  
Great Blue Heron

**POISONING**

Copper

Mute Swan

Endosulfan

Red-winged Blackbird

Lead

Acute

Bald Eagle

Chronic

Bald Eagle, Common Loon, Long-tailed Duck

Mercury (Possible)

Chronic

Bald Eagle

Organochlorine

American Robin

Selenium

Red-breasted Merganser, White-winged Scoter, Greater Scaup, Bufflehead, Long-  
tailed Duck, Horned Grebe

**POLIOENCEPHALOMALACIA**

White-tailed Deer

**POX**

Avian

Cutaneous

Wild Turkey

Diphtheritic

Wild Turkey

Unspecified

Canada Goose, Wild Turkey, Ruffed Grouse, Mourning Dove, American Crow, House Finch

Squirrel

Eastern Fox Squirrel, Eastern Gray Squirrel

**PROVENTRICULITIS**

Necrotic (Caseous)

Chronic

Common Loon

**RABIES**

Hoary Bat, Big Brown Bat

**SALMONELLOSIS**

Ring-billed Gull

**SARCOCYSTIS**

Severe

American Goldfinch

Unspecified

Bald Eagle

**SEPSIS**

Bacterial

Bald Eagle

**SEPTICEMIA**

Bacterial

White-tailed Deer, Raccoon, Great Blue Heron, Ring-billed Gull, Snapping Turtle

## **STARVATION**

Elk, White-tailed Deer, Gray Wolf, Raccoon, Cottontail Rabbit, Eastern Gray Squirrel, Northern Long-eared Bat, Bald Eagle, Red-tailed Hawk, Merlin, Great Horned Owl, Snowy Owl, Barred Owl, Turkey Vulture, Trumpeter Swan, Tundra Swan, Mute Swan, Red-breasted Merganser, White-winged Scoter, Canvasback, Redhead, Ring-necked Duck, Greater Scaup, Lesser Scaup, Common Goldeneye, Bufflehead, Ruddy Duck, Long-tailed Duck, Gadwall, Horned Grebe, American Coot, Great Blue Heron, American Bittern

## **STEATITIS**

Retrobulbar  
Fibrino-suppurative (Bacterial)  
White-tailed Deer

## **STRESS**

Big Brown Bat, Little Brown Bat, Northern Long-eared Bat, Bald Eagle, Ruffed Grouse, Mourning Dove, Common Grackle, Gray Catbird, American Robin

## **SUFFOCATION**

Wild Turkey, Red-winged Blackbird

## **TAMPONADE**

Cardiac  
White-tailed Deer

## **TOXICITY**

Corn  
White-tailed Deer

## **TRAUMA**

Elk, White-tailed Deer, Fallow Deer, Black Bear, Gray Wolf, Coyote, Red Fox, Gray Fox, Domestic Dog, Cougar, Bobcat, River Otter, Fisher, Mink, Muskrat, Badger, Striped Skunk, Raccoon, Virginia Opossum, Cottontail Rabbit, Eastern Fox Squirrel, Eastern Gray Squirrel, Big Brown Bat, Bald Eagle, Peregrine Falcon, Red-tailed Hawk, Broad-winged Hawk, Rough-legged Hawk, Northern Goshawk, Cooper's Hawk, Sharp-shinned Hawk, Great Horned Owl, Snowy Owl, Barred Owl, Screech Owl, Northern Saw-whet Owl, Turkey Vulture, Trumpeter Swan, Mute Swan, Common Loon, Red-breasted Merganser, Common Merganser, White-winged Scoter, Great Scaup, Lesser Scaup, Common Goldeneye, Ruddy Duck, Long-tailed Duck, Mallard, Horned Grebe, American Coot, Ring-billed Gull, Great Blue Heron, Green Heron, Sandhill Crane, Wild Turkey, Ruffed Grouse, Rock Dove, Common Raven, American Crow, Pileated Woodpecker, Northern Flicker, Hairy Woodpecker, Belted Kingfisher, American Robin, European Starling, Red-winged Blackbird, House Finch, Eastern Towhee, Yellow-Rumped Warbler, Veery, Eastern Massasauga Rattlesnake

**TUBERCULOSIS**

Bovine  
White-tailed Deer

**TUMOR**

Fibroma  
White-tailed Deer

Lipoma  
White-tailed Deer

Lymphoma  
Hepatic  
Wild Turkey

Oral Papilloma  
Gray Wolf

**PROLAPSED UTERUS**

White-tailed Deer

**WEST NILE VIRUS**

Osprey, Cooper's Hawk, Great Horned Owl, Long-eared Owl, Wild Turkey, Mourning Dove, Common Raven, American Crow

**WHITE-NOSE SYNDROME**

Big Brown Bat, Little Brown Bat, Northern Long-eared Bat

**WINTER KILL**

Eastern Massasauga Rattlesnake