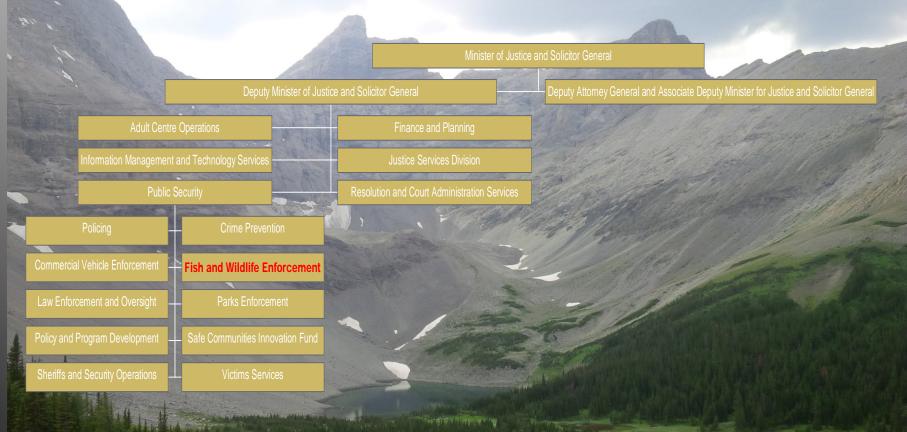


## FISH AND WILDLIFE ENFORCEMENT BRANCH PUBLIC SECURITY DIVSION

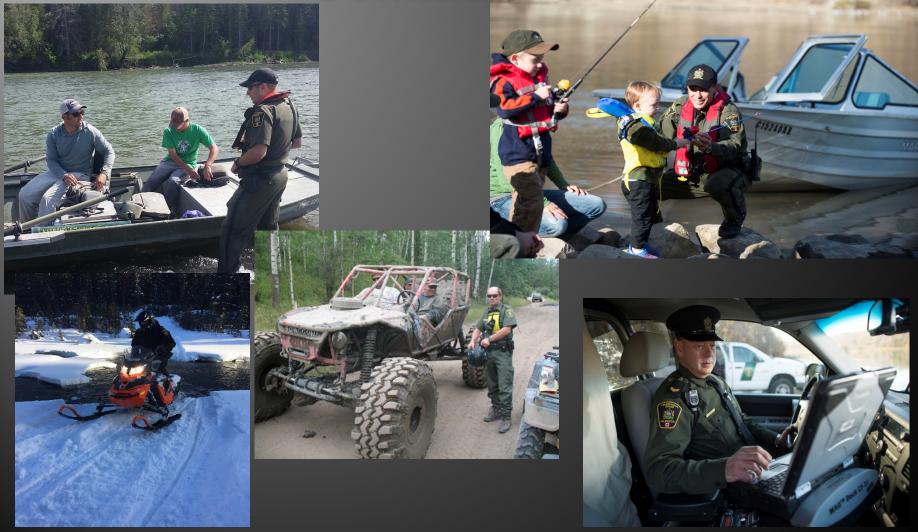
Superintendent Trevor Miller - Southern Region Inspector Ron Wiebe – Calgary Unit, Southern Region

## **JSG Organization Structure**



- 112 field Officers
- 38 other Enforcement officers : Senior Officers, Operations, SIFS and Forensic Unit
- 57 Districts, in 4 Regions
- 1-4 Officers per district

## Fish and Wildlife Officer's in the Community



The Government of Alberta's goals are to protect, preserve and manage Alberta's fish and wildlife, and to protect the lives and property of Albertans. To help meet these goals, Alberta's Fish and Wildlife officers:

- Ensure Albertans understand and follow legislation that protects fish and wildlife through education, prevention and enforcement.
- Administer programs and operations for human / wildlife conflict management.
- Provide support for public safety programs.

### Legal Authorities

#### Fish and Wildlife officers have the authority to enforce a number of Provincial and Federal Regulations

### Provincial Acts and Regulations

- Environmental Protection and Enhancement Act and Regulation
- Fisheries (Alberta) Act and Regulations
- Forests Act and Regulations
- Gaming and Liquor Act and Regulation
- Petty Trespass Act
- Provincial Offences Procedure Act and Regulation
- Provincial Parks Act and Regulation
- Public Lands Act (limited)
- Traffic Safety Act and Regulations
- Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act
- Wildlife Act and Regulation
- Peace Officer Act

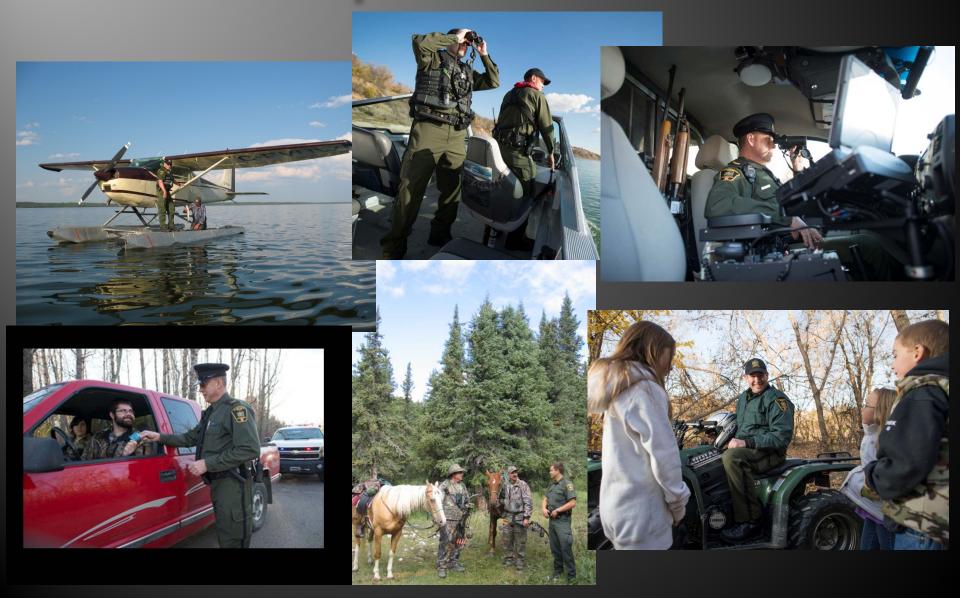
### **Federal Acts and Regulations**

- Fisheries Act (Canada)
- Freshwater Fish Marketing Act
- Migratory Birds Convention Act, 1994 and Regulations
- Canada Shipping Act, 2001
- Small Vessel Regulations
- Competency of Operator of Pleasure Craft Regulations
- Vessel Operation Restriction Regulations
- Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act and Regulations pursuant to Convention on International Trade in Endangered Species
- Criminal Code of Canada
- Controlled Drugs and Substances Act
- Alberta Fishery Regulations, 1998

### Fish and Wildlife is Responsible for Conservation Law Enforcement



## **Compliance Patrols**



## Investigations

- Investigations of public complaints/tips
   Officer initiated investigations
- Interviews/ interrogations
- Arrests
- Human source (informant manager)
- Warrants and Authorizations
- Evidence collection and analysis
- Court documents
- Trials and hearings

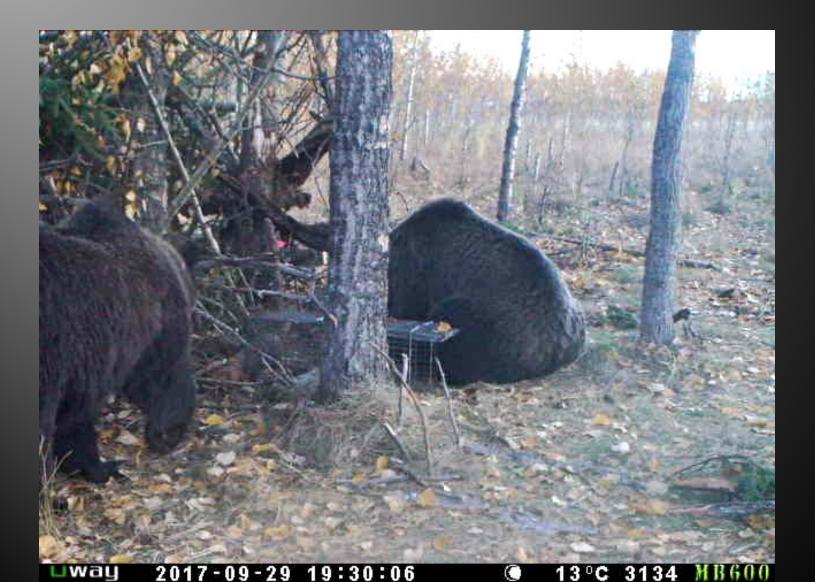
## **Problem Wildlife**



### Problem Wildlife/Public Safety and Property Protection

Dangerous wildlife response Human/widlife conflic tions Mauling fatalities, inju Compensation prograi Predation on livestock Ungulate damage to agricultural products Bear Response Team program

## Minutes from Calgary!!





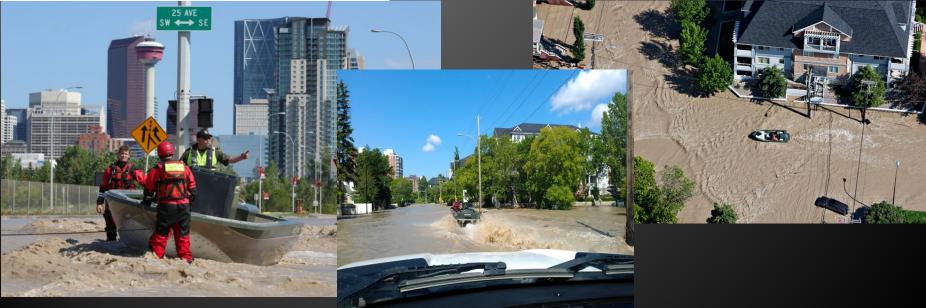
## **Grizzly Bear release**



## **Emergency Response Support**







### Invested in Community / Public Education



### **Public Education**



#### Scents-ible

Bears have to call, consuming up to 25,500 colorises a day (10 litics some than the samraga porson). While they prefer natural vegetation, they will get almost anything and will do almost anything to obtain food. That's will it is some protection to eliminate access to food and other attractants when you pictus; camp, food end other attractants and pop cams will get everything from piace houss and pop cans to fish parts' and conservice.

Bears have a keen sense of smell and are driven to investigate. They are attracted by scents as diverse as tootheaster and lower resellent.

Alberta

Bear Smart

Bears have been known to repeat actions. If a bear figures out how to open your pictuic coolee, or food storage area, it may try again. Caneleady stored food, an unclean cammeine or table scraus



Contribute to your safety and enjoyment of the outdoors in bear country by doing the following:

Cook, ent and depose of food and disbuster properly.
 Do not cook or eat to or near your tent. Dispose of garbage and fish remains in proper garbage constainers.
 Store likel or preprint. If you are comping many firms fractitions, the best without is to hange arguines between two trees with

a rope, 5-4 meters of the ground. Try to store field at heat 100 meters away from your carp.
Pelds your campate with care, Path tests away from dense bases or trees, lakesbores, trees-bases and mainting traits, and martal field assuress such as berry hashes at might, more around with cantion and always use a flashight.

range loade 200 mi is hawshin u. hoppeli. Recoverage how no how no was also for a star of your presence. Make more lefone writiniting around blind corners no en homose in the star of your presence. Make more lefone writiniting around blind corners is peep.

#### Your Children

ncourage your children to enjoy the outdoors, but keep a close eye on their activities when beam are most active evening, night and dawn).

When to be BearSmart

> You can make a difference!

#### in your presence known to bears as you go about your outdoor activities. Moving quickly and quietly, such as on a antain hile, can be hazardoux if you startle a bear. Be aware your behaviour can have an impact.

cosons/Weather: The prime time for bear activity is from May until October Illack and grazity bears look for different ruly summer: Avoid beary packets in summer and fall. Be ugh winds and frain, or merit falls and watercourse, because

> me, bears are most active from dusk until the early morning, mough bear country at that time of day.

#### In Campgrounds Store your food and toilet articles (toothpaste, soup, deodorant, etc.) safely. Never take these items into your tent or tent trailer.

Checklist

Don't hum or bury scrap food. Scal garbage in plastic bags for disposal in bear-proof hins, or pack it out.

- Abrays keep pets on a leash.
- Day Trips Witch for signs of recent bear activity (tracks, set, rolled logs and rocks, tern sturps, clawmarked trees, digging, arthills tern open). If you set these signs, lengt the area and return to your
- we use spipe, some the area and retain to your which campain.
   Make plenty of noise when going into the wind, in dense shrubbery and along streams and rivers.
- A load shout every few minutes is more effective than wearing bear bells.

#### Overnight Trips

- Before you depart, leave information about your distination and estimated return time.
- Use dried foods and a portable camp stose.
   Be sure bear spray is accessible at all times, even
- when you lie down to sleep. Ensure that the cooking area is well separated from your sleeping area. Avoid sleeping in the
- clothes you were while cooking. Fishing
- Clean fish at fish-cleaning stands or well away from came.
- Seal the fish in plastic bags and wash your hands.



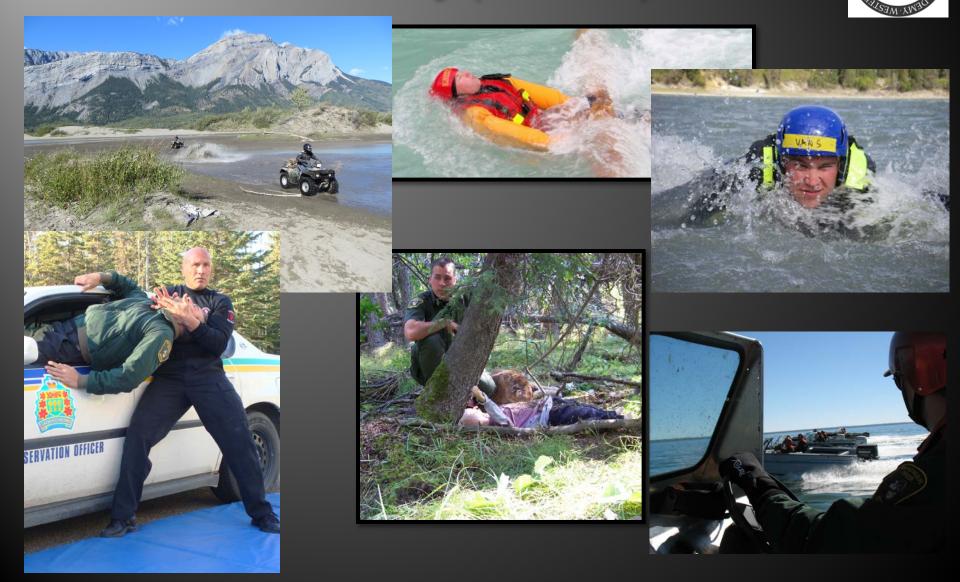
### **Operations Section**

Professional Standards Unit:

- Recruitment, training, equipment, uniform, internal investigations

 Compliance Unit:
 Aboriginal files, Constitutional File Management, Policy, Directives, Standards, Judicial Orders, Regulations

### Western Conservation Law Enforcemen Academy (WCLEA)





## Western Conservation Law Enforcement Academy (WCLEA)



### Special Investigations and Forensic Services Section

- Undercover Unit (UCU)
- Major Investigations and Intelligence Unit (MIIU)
- Forensic Services Wildlife Forensics Lab



## FORENSIC UNIT

- The most requested service that is provided is DNA matching
- Species Identification of evidence can occur via DNA sequencing, protein analysis and physical examination.









## FUNCTIONS OF THE FORENSIC UNIT

#### DNA analysis also used to link suspect predators to human mauling victim. Fish and wildlife forensic unit helped convict murderer Pickton

Posted on October 2, 2014 by Alberta Justice and Solicitor General

Forensic unit assisted RCMP in one of the largest criminal investigations in Canada

Back in 2003, the RCMP forensic service was working on the Robert William <u>Pickton</u> murder case. <u>Pickton</u> was eventually convicted of six counts of second-degree murder and given multiple life sentences in relation to the disappearance of women in the lower mainland of BC.



The RCMP asked the Alberta Fish and Wildlife Enforcement Branch's forensic unit to help identify some biological samples obtained from a search warrant executed at the <u>Pickton</u> farm in British Columbia. The forensic unit has extensive experience and expertise in identifying what species even the smallest tissue samples came from. The samples were analyzed using the same kind of test regularly used in wildlife crime





## **Undercover Unit**

- Alberta Fish and Wildlife has maintained a capacity to deliver an undercover program for over 40 years
- The use of undercover techniques to investigate and respond to fish and wildlife crime is common in most natural resource law enforcement agencies throughout North America and it is considered an integral part of the overall enforcement program and an appropriate response to serious fish and wildlife crime.
- Undercover techniques have proven to be a valuable investigative tool when responding to serious fish and wildlife crime and continues to be supported through various legislation/statutes as well as by the Provincial Courts; Supreme Court; Justice; Public and fisheries and wildlife managers.



## UNDERCOVER UNIT



### Trafficking Investigations – Operation Rollercoaster





### Major Investigations and Intelligence Unit

The prime purpose of the MIIU is to provide leadership and direction in major case file management to ensure that investigations are conducted in a comprehensive manner.

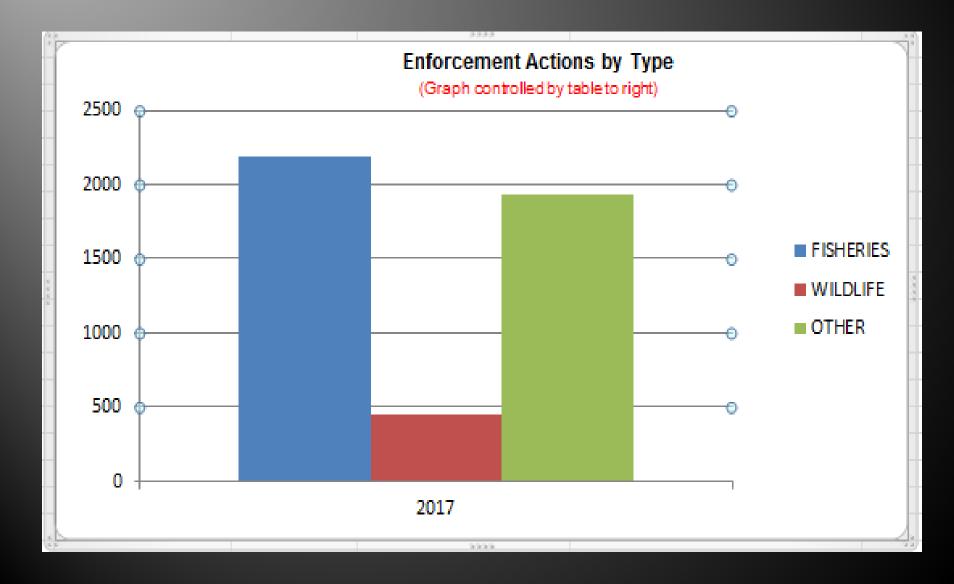
- Specialized enforcement techniques
- Provincial Surveillance Team
- Interprovincial and International Communication/Investigations
- Human Source Handling
- Report A Poacher
- Intelligence collection and dissemination



### Fisheries and Wildlife Enforcement

- It is a constant challenge to adapt to changing priorities for Fish & Wildlife Officers
- Wildlife, Fisheries, Public Lands, Aquatic Invasive Species place unique and varying demands on Officers
- Districts are spread from Fort Vermilion to Blairmore with 1 to 4 Officers per District
   Most violations are not called into the RAP Line
   Less than 3% of violations are detected
   Alberta's diverse and increasing population continues to place new pressures on officers

## **2017 Enforcement Actions**



# **Poaching in Alberta**







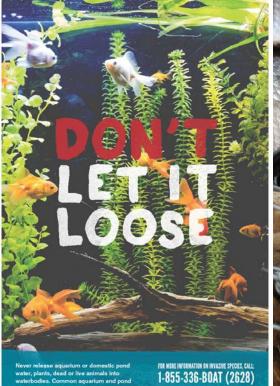
# **Aquatic Invasive Species**





## Invasive Species In Bow River

0



DON'T

Albertan



## AIS and Fish & Wildlife

- Fish and Wildlife Officers are trained to conduct inspections for mussel fouled boats
- Stopping vessels at inspection stations, as well as tracking down vessels that went by stations, is a new challenge in the fisheries enforcement world
- Protecting Alberta's lakes and rivers from these invasive species is virtually impossible once they have been released into the ecosystem

## Whirling Disease





#### **Whirling Disease Life Cycle**

Spores found in soil in bottom of waterbody

When an infected fish dies or is eaten by a predator, it releases the myxospores into the mud bottom where the Tubifex are and the cycle begins again. Intake of myxospores by Tubifex worms where they develop into Triactinomyxon (TAMs)

Fish become infected by the TAMs as they enter the skin

The Tubifex worm

into the water

releases the TAMs

Infected fish may begin exhibiting whirling behaviour, a black tail and spinal deformities

Fish are tested for whirling disease by examining the fish cartilage for myxospores.

Albertan Government

October 20\*

## Whirling Disease

#### HOT SPOT FOR DISEASE

Officials are considering removing all the fish — or even draining the small lake — in an effort to control whirling disease. The disease first showed up in mid-August, and there are fears it could spread to Lake Minnewanka and Two Jack Lake.

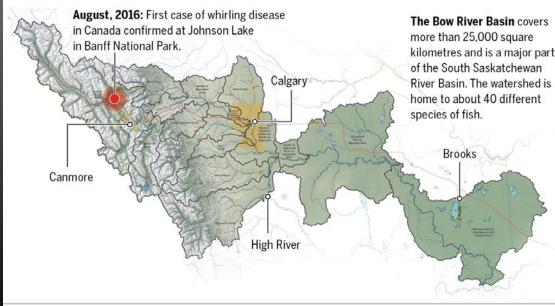
Tunnel

Mountain

Two Jack Lake

BANEE C

#### BOW RIVER BASIN



SOURCE: BOW RIVER BASIN COUNCIL, ALBERTA ENVIRONMENT

DARREN FRANCEY / POSTMEDIA NEWS

Late Winnewa

#### JOHNSON LAKE

- Area: 20 hectares
- Length: 1.1 kilometres
- Width: 200 metres
- Fish: Trout, whitefish

darren francey / postmedia new

# Whirling Disease Facts

#### What is whirling disease?

Whirling disease is an infectious disease of finfish. It is caused by Myxobolus cerebralis. This is a protozoan in the Class Myxosporea.

#### What species of finfish can be infected by whirling disease?

E Each species of finfish may have several common names, but only one common name is listed.

#### Is whirling disease a risk to human health?

No. The causal agent of whirling disease is not a risk to human health.

#### What are the signs of whirling disease?

- Whirling disease is a cause of death in the younger life stages of susceptible freshwater finfish. Overall deaths of infected fry and fingerlings can reach 90 percent.
- Affected finfish may exhibit any of the following signs:

#### behaviour

whirling swimming pattern

#### appearance

- skeletal deformities of the body or head, for example, shortening of the mandible and indentations on the top of the head
- tail may appear dark or even black
- Fish & WildlifeOfficers deal with containment, transport of fish and stopping transmission of the disease

## **Questions**?

