



2023 Aquatic Invasive Species Prevention Program

Society Background

The Okanagan and Similkameen Invasive Species Society (OASISS) is a non-profit organization dedicated to the prevention, detection and management of invasive species within the Okanagan-Similkameen region. Since the Society's establishment in 1996, OASISS strives to address invasive species through public education, outreach initiatives, and community stewardship programs.

Aquatics Program

The OASISS Aquatic Invasive Species (AIS) Prevention Program was founded in 2012 and strives to prevent the risks and impacts of aquatic invasive species primarily through outreach and education. The program operates within the Okanagan Valley Basin.



Partner Programs

The AIS Prevention Program works in partnership with two programs:

- 1 Okanagan Basin Water Board's (OBWB) campaign, "Don't Move a Mussel" (DMM)
- 2 Province of BC Mussel Defense Program in conjunction with its "Clean, Drain, Dry" (CDD) program

Program Overview

The AIS Prevention Program in 2023 consisted of:

- Distributing invasive mussel resources to businesses and organizations
- Developing new outreach tools
- Surveying boaters at boat launches
- Monitoring Okanagan lakes for invasive mussels through substrate monitors and plankton tow sampling
- Implementing a citizen science project for invasive mussel monitoring and invasive clam shoreline surveys
- Presenting on aquatic invasive species topics at youth summer camps
- Setting up educational booths at community events, festivals, farmers markets and local businesses
- Social media outreach



Our Team

Training Activities



Lisa Scott
Executive
Director



Katie Lewko
AIS
Assistant



Nikita Planz
AIS
Coordinator



Konrad Dyck
AIS
Assistant



Sierra Collins
Invasive
Species
Program
Assistant



Nina Ogasawara
AIS
Assistant

The Aquatics Team conducted various virtual training sessions and on-site field training throughout the work period. Training covered topics such as aquatic invasive species identification, prevention, learning about partner programs, providing public information, safety and more.



Guest speakers and organizations were also invited to present their expertise on the following topics:

- Rare wildlife and introduction to stewardship (Okanagan Similkameen Stewardship Society)
- Wildsafe BC (Regional District of Okanagan-Similkameen)
- Health and safety (Pharmacist)
- Familiarity with various boat types and parts (Vernon Yacht Club)
- Education on the importance of restoring the Sockeye salmon population and the negative effects of invasive species (Okanagan Nation Alliance)
- Invasive Mussel Defense Program, highway inspection station and decontamination demonstration (Penticton Invasive Mussel Defense Crew)

Education and Outreach

Overview

Throughout the summer, the aquatics team helped spread awareness about aquatic invasive species (AIS) through in-person activities and online platforms. Overall, the team interacted with approximately **3400 people!**

Material Distribution

Staff distributed Don't Move A Mussel (DMM) materials such as posters, rack cards, information sheets and sandwich boards to various businesses, tourism centres and organizations around the Okanagan valley.



234 businesses/organizations contacted



178 businesses and organizations received hard-copy materials



65 businesses/organizations received digital resources

Community Events

Staff set up information booths at various community events, festivals and farmers markets throughout the summer and handed out DMM giveaways.



15 events



1022 interactions



Kids Camps

Staff presented to kids at summer camps and taught important lessons about aquatic invasive species prevention.



8 camps

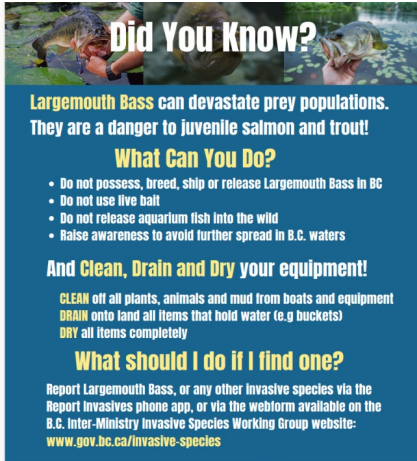


139 attendees



Canadian Tire Outreach

This year, the AIS Assistants identified Canadian Tire as a key business where specialised materials could be distributed. In consultation with management, the assistants produced a line of "Did you know" posters for fishing sections, an FAQ about AIS for people purchasing paddleboards, kayaks and canoes, and a poster for display on their sports desk.



Educational Videos

The AIS Team scripted and filmed four short, educational videos for social media on the following topics:

1. How to Clean, Drain, Dry your Paddleboard
2. The Rocky Mountain Ridged Mussel
3. Purple Loosestrife
4. Invasive Fish in the Okanagan

Social Media Outreach

Social media outreach was enhanced through Instagram, Facebook and YouTube. Posts and videos shared topics about AIS prevention, species identification, partnerships, and staff appreciation.



60+ shared posts



Boat Launch Surveys

Boat Launch Interactions

Staff attended launches around the valley to educate boaters about the threat of invasive mussels and ask a survey questionnaire.



18 launches attended



2197 interactions



1237 watercraft surveyed



Where Boaters Were Coming From

One question asked on the survey questionnaire was where boaters were travelling from. Results showed that the majority of boaters interacted with were travelling from within the province (89%). Boaters travelling from outside the province mostly came from Alberta (10%), but also originated from Saskatchewan, Manitoba, Quebec, Washington (<1%).

Boater Knowledge of Aquatic Invasive Species and Clean, Drain, Dry

Boaters were also asked if they were aware of aquatic invasive species like zebra and quagga mussels and/or clean, drain, dry practices, with answers either being a 'yes' or 'no'.



87% of Boaters Were Aware



13% of Boaters Were Not Aware

Sources of Knowledge

For boaters who were aware of aquatic invasive species and/or clean, drain, dry practices, a follow-up question asked the source of their information. The top five sources of knowledge in 2023 were:



1. OASISS (19%)



2. Previous Inspection in B.C. (17%)



3. Highway Inspection Signs (11%)



4. Personal Experience (10%)



5. Signs at Boat Launches (7%)

Other sources of knowledge mentioned were TV advertising / news, internet, highway billboard signs, related work, word of mouth, social media boating exams, and radio.

Boat Launch Surveys

Out-of-Province Watercraft That Stopped at a B.C. Watercraft Inspection Station

Staff asked boaters if they had previously stopped at a B.C. watercraft inspection station with their watercraft. This was relevant for boaters travelling from outside of the province, who would encounter inspection stations on major highways entering the province. The results below demonstrate that while most of out-of-province watercraft received inspections, there are still a significant portion that did not and present a risk to Okanagan Lakes.

✓ 81% of boaters stopped ✗ 19% of boaters did not stop



Credit: www2.gov.bc.ca/gov/content/invasive-mussels



Boater Knowledge of the Don't Move A Mussel (DMM) Program

Boaters were also asked if they had heard of the Don't Move A Mussel Program, with answers either being a 'yes' or 'no'.

✓ 50% heard of the DMM Program ✗ 50% had not heard of the DMM Program

Sources of DMM Knowledge

For boaters who had heard of the Don't Move A Mussel Program, a follow-up question asked where they had first learned about it from. The top five sources were:

1. Through OASISS (40%)
2. Signs at Boat Launches (10%)
3. Personal Experience (9%)
4. TV Advertising/News (9%)
5. Highway Billboard Signs (7%)

Other sources of knowledge mentioned were related work, internet, radio, social media, word of mouth, and newspapers.

Aquatic Invasive Species Monitoring

Habitat Conservation Trust Fund Invasive Mussel Monitoring

Okanagan lakes were monitored for the presence or absence of invasive mussels through both plankton tows and substrate monitors. Monitoring was conducted from June-October, in partnership with several marinas, yacht clubs and local government.



5 lakes



19 sites



131 samples



No invasive mussels found!



Citizen Science - Invasive Clam Shoreline Surveys

With the help of volunteers from the Osoyoos Water Quality Society, OASISS conducted shoreline surveys for invasive clams in Osoyoos Lake.



5 Volunteers



6 beaches



No invasive clams found!

Citizen Science – Invasive Mussel Monitoring

OASISS recruited community members with private docks on Kalamalka, Wood, Okanagan, Skaha and Osoyoos Lakes to help monitor for invasive mussels.

Volunteers had to report their checks biweekly throughout the summer.



19 Volunteers



No invasive mussels found!



Thank You to Our Partners and Funders!

Thank you to the following partners, who provided access for invasive mussel sampling, provided administrative support, gave permission for attending boat launches, helped share messaging about aquatic invasive species prevention, conduct invasive clam shoreline surveys, and/or assisted with training of staff.

Thank you to our partners and funders!

BC Ministry of Environment and Climate Change Strategy
BC Ministry of Land, Water and Resource Stewardship
BC Parks
Canada Summer Jobs
City of Kelowna
City of Penticton
City of Vernon
City of West Kelowna
Desert Sunrise Marina
District of Coldstream
District of Lake Country
District of Peachland
Habitat Conservation Trust Foundation
Kelowna Yacht Club
Naramata Yacht Club

Okanagan Basin Water Board
Osoyoos Cottages Marina
Osoyoos Indian Band
Osoyoos Lake Water Quality Society
Peachland Yacht Club
Penticton Marina
RCMP Volunteers from the North Okanagan
Regional District of Central Okanagan
Regional District of North Okanagan
Regional District of Okanagan-Similkameen
Skaha Marina
Town of Osoyoos
Turtle Bay Marina
Vernon Yacht Club
West Kelowna Yacht Club



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