SUSTAINABLE BLUE ECONOMY PROFESSIONAL

Aquaculture Technician

As an Aquaculture Technician, you manage aquatic life in hatcheries and aquaculture facilities, ensuring healthy growth through feeding, habitat maintenance, water quality monitoring, and disease prevention. Your work supports sustainable seafood production and contributes to a vital industry for global food security.





JOB DUTIES

- Monitor and maintain water quality;
- Feed fish and other marine organisms according to precise schedules;
- Assess fish behaviour and health, identifying signs of disease;
- Record data on water quality, feeding patterns, and growth rates;
- Clean and maintain tanks, filters, and other aquaculture equipment;
- Assist in the breeding and hatching processes;
- Record data on growth rates, water parameters, and feed intake;
- Collaborate with biologists, veterinarians, and other aquaculture professionals; and
- Develop and update standard operating procedures (SOPs).

EDUCATION

- Diploma or Bachelor's Degree:
 - A diploma or degree in Aquaculture, Marine Biology, Fisheries Science, or Environmental.
- Certifications in areas like water quality testing, disease management, and safety (e.g., First Aid, CPR) are beneficial.
- Specialized training in aquaculture techniques and sustainable farming practices, such as those offered by the Aquaculture Certification Council (ACC) or similar organizations, can enhance qualifications.

TECHNICAL SKILLS

- Proficiency in Water Quality Monitoring and Analysis;
- Feeding and Nutrition Management for Aquatic Species;
- Equipment Maintenance and Operation for Aquaculture Systems; and
- Data Collection and Record-Keeping for Aquaculture Operations.

PERSONAL AND PROFESSIONAL SKILLS

- Attention to Detail
- Problem-Solving
- Physical Stamina
- Communication Skills
- Ability to Work Effectively in Outdoor and Laboratory Settings

where to work

Aquaculture Technicians can work in organizations including:

Fish Hatcheries | Commercial Aquaculture Farms Research and Development Institutions | Seafood Processing Facilitie Environmental Conservation Organizations | Government Fisheries Departments Universities and Marine Biology Research Centers

- INDIGENOUS PATHWAYS

ECO Canada is committed to increasing Indigenous Participation in the Blue Economy by highlighting non-traditional education and training pathways.

For Indigenous individuals interested in sustainable aquaculture, a career as an Aquaculture Technician offers a valuable way to contribute to food security and environmental stewardship within their communities. Programs dedicated to Indigenous aquaculture training provide pathways combining traditional ecological knowledge with modern aquaculture practices.

INDIGENOUS FISHERIES AND AQUACULTURE INITIATIVE (IFAI)

INITIATIVES SUPPORTED BY FISHERIES AND OCEANS CANADA

- Offers funding, training, and resources for Indigenous communities to develop and manage aquaculture facilities; and
- Provides Indigenous participants with technical training in fish husbandry, water quality monitoring, and facility management—skills essential for Aquaculture Technicians.

BEAHR AQUACULTURE TECHNICIAN TRAINING (ATT)

- Provides training for entry-level positions as aquaculture technicians with the ability to assist fish farm and hatchery managers with breeding and rearing of marine species;
- Aims to help build local capacity within indigenous communities, with a focus on sustainable aquaculture activities; and
- Helps participants in developing their technical knowledge, professional attitude, and organizational skills to find meaningful employment in the ocean sector.

B.C. INDIGENOUS AQUACULTURE FUND

- Supports Indigenous-led aquaculture projects in British Columbia;
- Fund allows Indigenous communities to create sustainable aquaculture operations, providing training and mentorship to Indigenous youth and adults interested in technical roles within the field; and
- Participants gain skills in hatchery management, fish health, and sustainable resource use, ensuring that they can uphold industry standards and traditional practices.

ABORIGINAL AQUACULTURE ASSOCIATION (AAA)

- Offers tailored training programs, scholarships, and apprenticeships specifically for Indigenous individuals; and
- Focus on skill-building in fish breeding, environmental monitoring, and sustainable aquaculture practices.

