



INTERNATIONAL EDUCATED ANIMAL SCIENTIST CAREER INFORMATION

OVERVIEW

Most Animal Science Ph.D. programs allow students to focus on a particular animal science niche, such as equine management, reproductive physiology or animal nutrition. Students are required to complete a doctoral dissertation presenting new research in animal science. Research-intensive courses focus on biological and physical aspects of animal science. Animal scientists represent a small percentage of all agricultural scientists in Canada.

EDUCATION, TRAINING AND QUALIFICATIONS

Most degree programs require students to conduct independent research outside of traditional classrooms, and many courses allow for hands-on experience with animals and agricultural settings. Common courses include:

- Animal (livestock) reproduction
- Principles of animal welfare
- Equine genetics and reproduction
- Agricultural ecology
- Animal genomics and bioinformatics
- Animal nutrition
- Animal biology

A master's or doctoral degree in Animal Science or related discipline is required for employment as a research scientist. Post doctoral research experience is usually required for employment in academic departments or research institutions.

EMPLOYMENT AREAS

Animal scientists are employed by federal and government agencies such as Canadian Federal Government Department of Fisheries and Oceans, agricultural companies and health and safety organizations, government research labs; marine science organization; environmental protection agencies; commerce. Some animal scientists are also consultants for agricultural companies.

Prepared May 2020 by BCPLAN Navigator. Updated February 2022

© 2018-2022 British Columbia's Prior Learning Action Network

This document is protected by applicable Canadian copyright laws and regulations. Except as otherwise provided for under Canadian copyright law, this document and its content may not be reproduced, published, distributed, or otherwise stored, transmitted or converted, in any form or by any means, without the prior written permission of the copyright owner.



With a doctorate degree, professionals can also seek postsecondary teaching positions within colleges and universities. Employment may involve focusing on animals including beef cattle, sheep, poultry, pigs or horse. Animal scientists may pursue careers in academia or private consultation (e.g. ruminant animal nutrition or general physiological well-being).

Graduates (PhDs) may also find job opportunities in areas including animal breeding, food and fibre production, animal behaviour and welfare, biotechnology, livestock management, etc.

Jobs directly related to this degree can also include academic researcher, animal nutritionist, animal technician, nature conservation officer, zookeeper or zoologist. Other possible jobs include veterinary assistant, research assistant, farm hand, lab technician

SPECIALIZATION - POULTRY

British Columbia's poultry industry has four primary supply-managed commodities - Chicken (meat), Layer (egg), Broilers and Turkey. Smaller sectors include layer pullet growers, layer breeders and other poultry such as ducks, geese, squab (pigeon), pheasant, quail and silkie chickens.

Poultry housing, handling and care requirements in B.C. are set by the respective marketing boards, and minimum standards are set by the National Farm Animal Care Council. All supply-managed producers are subject to regular audits of their on-farm animal welfare standards, biosecurity and food safety programs.

The [Animal Health Act](#) was updated in January of 2015 to allow the Province to better manage and respond to animal diseases to:

- Strengthen detection and management of diseases that can spread between animals and humans
- Ensure that B.C.'s farms are competitive by preventing, promptly detecting and eradicating animal diseases
- Reflect the realities of increasing global travel and trade

Poultry is a regulated market in British Columbia ([BC Farm Industry Review Board](#) (BCFIRB)) and the [Canadian Food Inspection Agency](#) has a mandate to ensure a safe food supply for everyone in Canada.

Prepared May 2020 by BCPLAN Navigator. Updated February 2022

© 2018-2022 British Columbia's Prior Learning Action Network

This document is protected by applicable Canadian copyright laws and regulations. Except as otherwise provided for under Canadian copyright law, this document and its content may not be reproduced, published, distributed, or otherwise stored, transmitted or converted, in any form or by any means, without the prior written permission of the copyright owner.



BC Chicken Growers' Association (BCCGA) is under the BC Poultry Marketing Board and is the industry group representing BC Chicken farmers and advocating on behalf of the 325 licensed chicken growers in BC.

Poultry producers – various industry committees and organizations include BC Chicken Marketing Board, BC Agriculture Council, BC Poultry Association, BC Sustainable Poultry Farming Group, Biosecurity, Food Safety and Animal Welfare.

GOVERNMENT FUNDING OPPORTUNITIES

Government of BC Research funding opportunities can be found at <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/animal-production/poultry>

SPECIALIZATION - FISHERIES AND AQUACULTURE

BC's coastline is conducive to [aquaculture](#) because of water quality, climate and sheltered bays. The three main groups of species currently cultured in local waters include salmon and other finfish, shellfish and marine plants. In British Columbia, all aquaculture operations are required to meet certain health management practices to obtain and maintain a licence. Tools and diagnostic resources are available to assist aquaculture producers in meeting these legislated requirements.

As a condition of the aquaculture licence, licence holders are required to prepare fish health management plans, and regularly report on key operation parameters including, but not limited to:

- production and biomass
- mortality
- health status of stocks
- use of veterinary drugs and pest control products
- escapes
- marine mammal interaction

The department of [Fisheries and Oceans Canada](#) are responsible for protecting fish health. The [DFO Pacific](#) regional headquarters is located in Vancouver and there are

Prepared May 2020 by BCPLAN Navigator. Updated February 2022

© 2018-2022 British Columbia's Prior Learning Action Network

This document is protected by applicable Canadian copyright laws and regulations. Except as otherwise provided for under Canadian copyright law, this document and its content may not be reproduced, published, distributed, or otherwise stored, transmitted or converted, in any form or by any means, without the prior written permission of the copyright owner.



numerous offices and 5 research centres in more than 30 communities across British Columbia and the Yukon.

The department's main activities in the Pacific Region are:

- management of fisheries
- management of sustainable aquaculture
- marine transportation services and safety
- marine environmental protection and research
- management of federally owned small craft harbours

Their website provides the location of the regional head office and a list of the regional offices.

VOLUNTEER SUGGESTIONS

Volunteering at a Provincial Fish and Wildlife Branch, with the Federal Department of Fisheries and Oceans (DFO) or with a veterinarian, retail fish store, aquarium or zoo, wildlife rescue center or natural history group may be options, in addition to serving as a research assistant. All such activities provide the opportunity to network.

RESOURCES – GENERAL AND FISHERIES

BC Agricultural Council - <https://bcac.ca/>

BCIT (Fish, Wildlife and Recreation Diploma program) - <https://www.bcit.ca/study/programs/7930dipma>

Government of Canada - Fisheries and Oceans Canada in the Pacific Region - <https://www.pac.dfo-mpo.gc.ca/index-eng.html>

Ocean Networks Canada - <http://www.oceannetworks.ca/about-us>

UVIC Marine Sciences - <https://www.uvic.ca/science/biology/undergraduate/programs/marine-sciences/index.php>

Prepared May 2020 by BCPLAN Navigator. Updated February 2022

© 2018-2022 British Columbia's Prior Learning Action Network

This document is protected by applicable Canadian copyright laws and regulations. Except as otherwise provided for under Canadian copyright law, this document and its content may not be reproduced, published, distributed, or otherwise stored, transmitted or converted, in any form or by any means, without the prior written permission of the copyright owner.



RESOURCES - POULTRY

BC Broiler Hatching Egg Commission - <https://bcbhec.com/>

BC Chicken Growers' Association (BCCGA) - <http://bcchicken.ca/growers/bc-chicken-growers-association/>

BC Poultry Marketing Board - <http://bcchicken.ca/>

BC Turkey Farmers - <http://www.bcturkey.com/>

Chicken Farmers of Canada - <https://www.chicken.ca/>

Chicken Hatching Egg Producers - <http://chep-poic.ca/>

Egg Farmers of Canada - <https://www.eggfarmers.ca/>

Government of BC (Poultry) - <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/animal-production/poultry>

Poultry Science Association (Western Canada) - <https://poultryscience.org/About-WPSA-Canada>

Poultry Science Association (USA) - <https://poultryscience.org/>

Turkey Farmers of Canada - <https://www.turkeyfarmersofcanada.ca/>



JOB BOARDS

Department of Employment and Social Development Canada - <https://www.jobbank.gc.ca/home>

Department of Fisheries and Oceans Canada - <https://www.dfo-mpo.gc.ca/career-carriere/index-eng.html>

Eluta - <https://www.eluta.ca/search?q=Animal+Science&l=Vancouver%2C+BC&qc=>

Government of Canada Job Bank - <https://www.jobbank.gc.ca/home>

Indeed (Animal Science jobs) - <https://ca.indeed.com/Animal-Science-jobs-in-British-Columbia>

Ocean Networks - <https://www.oceannetworks.ca/about-us/jobs-opportunities>