



North American Commission

NAC(19)04

Annual Report

(Tabled by Canada)

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Submitted by: Fisheries and Oceans Canada

Date: May 15, 2019 for calendar year 2018

1. Summary of salmonid controlled disease incidents

The Canadian Food Inspection Agency (CFIA) is responsible for Canada's National Aquatic Animal Health Program and is the Competent Authority for aquatic animal health which includes meeting Canada's international reporting obligations to the World Organisation of Animal Health (OIE) under the World Trade Organization (WTO) Sanitary and Phytosanitary (SPS) Agreement.

The CFIA updates the health status of Canada's aquatic animals monthly as mandatory notifications of aquatic animal diseases are confirmed (See Annex).

For more information, please consult the CFIA website or contact:

- Disease Status in Canada: Dr. Debbie Barr, Director, Animal Health, Welfare and Biosecurity Division, Programs and Policy Branch, CFIA. Debbie.barr@inspection.gc.ca
- International Trade: Dr. Mohit Baxi, Director, Animal Import/Export Division, International Affairs Branch, CFIA. Mohit.Baxi@canada.ca

2018 summary of federally reportable diseases of finfish

(<http://inspection.gc.ca/animals/aquatic-animals/diseases/reportable/2018/eng/1549326715065/1549326715393>).

Current as of: 2018-12-31

| Disease | Total |
|--|--------------|
| Ceratomyxosis (<i>Ceratomyxa shasta</i>) | 0 |
| Epizootic haematopoietic necrosis | 0 |
| Infectious haematopoietic necrosis | 1 |
| Infectious pancreatic necrosis | 2 |
| Infectious salmon anaemia | 17 |
| Koi herpesvirus disease | 4 |
| Spring viraemia of carp | 0 |
| Viral haemorrhagic septicaemia | 1 |
| Whirling disease (<i>Myxobolus cerebralis</i>) | 1 |
| White sturgeon iridoviral disease | 0 |

2018 confirmed cases of federally reportable diseases that affected salmonids¹ in the Atlantic Region

Locations infected with infectious salmon anaemia²:

| Date confirmed | Location | Animal type infected | Scientific Name |
|--|-----------------|-----------------------------|------------------------|
| November 21 | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| November 9 | Newfoundland | Atlantic salmon | <i>Salmo salar</i> |
| October 3 Table note * | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| September 11 | Newfoundland | Atlantic salmon | <i>Salmo salar</i> |
| August 30 Table note * | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| August 28 | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| July 27 | Newfoundland | Atlantic salmon | <i>Salmo salar</i> |
| July 24 | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| June 20 Table note * | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| June 20 Table note * | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| May 3 | New Brunswick | Atlantic salmon | <i>Salmo salar</i> |
| May 2 Table note * | Newfoundland | Atlantic salmon | <i>Salmo salar</i> |
| March 26 | Nova Scotia | Atlantic salmon | <i>Salmo salar</i> |
| March 13 | Nova Scotia | Atlantic salmon | <i>Salmo salar</i> |
| March 9 Table note * | Nova Scotia | Atlantic salmon | <i>Salmo salar</i> |
| February 13 | Newfoundland | Atlantic salmon | <i>Salmo salar</i> |

Table Note * This virus strain is not known to cause disease.

Locations infected with infectious pancreatic necrosis³:

| Date confirmed | Location | Animal type infected | Scientific Name |
|-----------------------|-----------------|-----------------------------|------------------------------|
| July 4 | Nova Scotia | Rainbow trout | <i>Oncorhynchus mykiss</i> |
| June 7 | Nova Scotia | Brook trout | <i>Salvelinus fontinalis</i> |

¹ Reporting does not distinguish whether the salmonids were cultured or wild.

² <http://inspection.gc.ca/animals/aquatic-animals/diseases/reportable/2018/infectious-salmon-anaemia-2018-eng/1520361142560/1520361212232>

³ <http://inspection.gc.ca/animals/aquatic-animals/diseases/reportable/2018/infectious-pancreatic-necrosis-2018-eng/1530800909800/1530801026365>

2. Summary of breaches of containment of salmonids from net cages

| Species (Strain, if applicable) | Number ¹ | Average size of fish ² | Location ³ | Result ⁴ | Cause of the breach | Date of breach |
|--|---------------------|-----------------------------------|---------------------------------------|--|---------------------|----------------|
| Atlantic Salmon | 3,000 | 3-5 lbs | Olive Cove, Newfoundland and Labrador | Recapture effort conducted - 400 fish recaptured | Net repair fail | July 2018 |
| Rainbow Trout | 29,000 | 50 grams | Bras d'Or Lake, Nova Scotia | 50% recapture by feeding | Human Error | May, 2018 |
| No escapes were reported in Quebec, Prince Edward Island, or New Brunswick for 2018. | | | | | | |

Notes:

1. This should be the best estimate possible, though it is recognized that exact numbers may be difficult to obtain. Also note that methodologies for determining and numbers differ between provinces and are presently not directly comparable. Efforts are underway to resolve these differences.
2. Based on the codes of containment, it was agreed that average size is a more accurate measurement than life stage.
3. The more specific the information the better, however Bay level is considered sufficient.
4. This refers to using recapture methods as detailed in the relevant code of containment and summarizing the results of the recapture attempt.

3. Summary of Salmonid introductions from outside the Commission Area

| Species (strain, if applicable) | Number | Life Stage | Origin ¹ | Destination ² | Purpose ³ | Land-Based or Marine |
|---------------------------------|-----------|------------|--------------------------------------|----------------------------------|----------------------|----------------------|
| Atlantic Salmon | 60,000 | Eyed eggs | Stofnfiskur Ltd., Iceland | Elanco, Victoria, PE | Research | Land-Based |
| Rainbow Trout | 2,000 | Eyed eggs | Troutlodge Inc, Hoodsport WA, USA | Elanco, Victoria, PE | Research | Land-Based |
| Rainbow Trout | 100,000 | Eyed eggs | Riverence LLC, Rochester, WA, USA | Ocean Trout Farms, Brookvale, PE | Aquaculture | Land-Based |
| Rainbow Trout | 2,150,000 | Eyed eggs | Troutlodge Inc. Bonney Lake, WA, USA | Ocean Trout Farms, Brookvale, PE | Aquaculture | Land-Based |
| Rainbow trout | 800,000 | Eyed eggs | Troutlodge Inc. Hoodsport, WA, USA | Ocean Trout Farms, Brookvale, PE | Aquaculture | Land-Based |

| | | | | | | |
|---|---------|-----------|---|-----------------------|-------------|--------------------------------|
| Atlantic salmon (<i>Salmo salar</i>) Strain: Saga | 212,000 | Eyed Eggs | Iceland | Centre Burlington, NS | Aquaculture | Land-based Grow out Facility |
| Rainbow Trout (<i>Oncorhynchus mykiss</i>) | 650,000 | Eyed Eggs | Washington, USA, | Merigomish, NS | Aquaculture | Land-based Freshwater Hatchery |
| Rainbow Trout (<i>Oncorhynchus mykiss</i>) | 950,000 | Eyed Eggs | Washington, USA, | Wolfville, NS | Aquaculture | Land-based Freshwater Hatchery |
| Rainbow Trout (<i>Oncorhynchus mykiss</i>) | 50,000 | Eyed Eggs | Washington, USA, | Centrelea, NS | Aquaculture | Land-based Freshwater Hatchery |
| Rainbow Trout (<i>Oncorhynchus mykiss</i>) | 100,000 | Eyed Eggs | Washington, USA, | St. Andrews, NS | Stocking | Land-based Freshwater Hatchery |
| Rainbow Trout (<i>Oncorhynchus mykiss</i>) | 60,000 | Eggs | Hoodspout Facility of Troutlodge, Washington, USA | Montebello, Québec | Stocking | Land-based Freshwater Hatchery |
| Rainbow Trout (<i>Oncorhynchus mykiss</i>) | 50,000 | Eggs | Hoodspout Facility of Troutlodge, Washington, USA | Montebello, Québec | Stocking | Land-based Freshwater Hatchery |
| Arctic Char (<i>Salvelinus alpinus</i>) | 45,000 | Eggs | Icy Water Ltd, Yukon, Canada | New Richmond, Québec | Aquaculture | Land-based Freshwater Hatchery |

No salmonids were imported from outside the convention area into New Brunswick and Newfoundland and Labrador in the 2018 calendar year.

Notes:

1. This would be the province or state for introductions from the west coast; or country for international introductions. It was decided that introductions between Canada and the US that are within the NASCO Commission Area (between Maine and New Brunswick, for example) would not be included here as those introductions would be captured in other avenues (ICES WGITMO, for example) and because these are not as relevant.

2. The more specific the information the better, however Bay level is considered sufficient.
3. This refers to the intention for the introduction – aquaculture, research, stock enhancement, etc.

4. Summary of Transgenic activities within the Country Annex 1 of NAC (10)6

In 2018, there were no known violations of the *Canadian Environmental Protection Act* in respect of transgenic Atlantic salmon.

On July 27, 2018, AquaBounty Canada Limited submitted a regulatory package (notification) to Environment and Climate Change Canada, in accordance with the *Canadian Environmental Protection Act*, for the commercial manufacture and production (grow-out) of the AquaAdvantage® Salmon (a genetically-modified, growth enhanced Atlantic salmon) at a new land-based aquaculture facility near Rollo Bay, PEI.

The notification triggered scientific environmental and indirect human health risk assessments that are used to inform the regulatory decision making process. The regulatory assessment period ended March 24, 2019, followed by a public release of the [results](#).

The assessments concluded that AquaAdvantage Salmon is not harmful to the environment or human health when produced under strict containment conditions. AquaBounty's installation, in the locality of Rollo Bay, is a fully contained land-based aquaculture facility.

The Government of Canada led by Environment and Climate Change Canada has put in place measures to ensure that the secure containment of AquaAdvantage Salmon. These measures include, *inter alia*, strict physical, chemical, and biological measures, and operational procedures.

Annex

Additional Information

- Information on all confirmed findings of regulated diseases is publicly available on the CFIA's website (see <http://www.inspection.gc.ca/animals/aquatic-animals/diseases/reportable/2017/eng/1339174937153/1339175227861>).
- The CFIA also maintains information on the status in Canada of controlled diseases in Canada (see <http://www.inspection.gc.ca/animals/aquatic-animals/eng/1299155892122/1320536294234>).