



## Dalhousie University Archives

### Finding Aid - F. Ronald Hayes fonds (MS-2-695)

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Dalhousie University Archives  
6225 University Avenue, 5th Floor, Killam Memorial Library  
Halifax  
Nova Scotia  
Canada  
B3H 4R2  
Telephone: 902-494-3615  
[Email: archives@dal.ca](mailto:archives@dal.ca)  
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## F. Ronald Hayes fonds

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## Summary information

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<b>Repository:</b>	Dalhousie University Archives
<b>Title:</b>	F. Ronald Hayes fonds
<b>Reference code:</b>	MS-2-695
<b>Date:</b>	1926-1974, predominate 1955-1959 (date of creation)
<b>Language:</b>	English
<b>Physical description:</b>	0.5 m of textual records. - [3 boxes]
<b>Note [generalNote]:</b>	Preferred citation: [Identification of item], F. Ronald Hayes fonds, MS-2-695, Box [box number], Folder [folder number], Dalhousie University Archives, Halifax, Nova Scotia, Canada.

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## Administrative history / Biographical sketch

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### Note

F. Ronald Hayes was a professor of zoology and environmental studies at Dalhousie University. He founded and was the first director of the the Institute for Oceanography and the Institute for Environmental Studies, which later became the School for Resource and Environmental Studies. Hayes conducted research on fish and bacteria in freshwater systems across North America. In 1965 he received an honorary Doctor of Laws degree from Dalhousie University. The Professor F. Ronald Hayes International Scholarship was established in his memory.

### Custodial history

The fonds was acquired from an unknown donor in 1996.

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## Scope and content

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The fonds contains records that span Hayes' career as a zoology professor. It consists of research data, laboratory experiments and other teaching material, correspondence, and publications. The research data has a wide geographic scope, but was primarily gathered in Nova Scotia.

## Notes

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### Title notes

### Arrangement

Materials in the fonds have been arranged thematically, with order imposed by the archivist.

### Restrictions on access

There are no access restrictions on this fonds.

### Conditions governing use

Materials do not circulate and must be used in the Archives and Special Collections Reading Room. Materials may be under copyright. Contact departmental staff for guidance on reproduction.

### Accruals

No further accruals are expected.

### Other notes

- **Publication status:** Published

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## Access points

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- Dalhousie University. Faculty of Management. School for Resource and Environmental Studies.
- Textual record (documentary form)
- Correspondence (subject)
- Dalhousie University--Publications (subject)
- Dalhousie University--Societies, etc. (subject)
- Environmental monitoring--Canada (subject)
- Environmental monitoring--United States (subject)
- Faculty papers (subject)
- Freshwater biology (subject)
- Freshwater fishes--Canada (subject)
- Freshwater fishes--United States (subject)
- Personal archives (subject)
- Zoology (subject)

## Collection holdings

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### **Series: Fish and bacteria research files**

Title: Fish and bacteria research files

Date: 1955-1962 (date of creation)

Scope and content:

Series contains records relating to Hayes' research on fish and bacteria in freshwater systems. Research data was gathered on trips to lakes in Nova Scotia, New Brunswick, Prince Edward Island, Ontario, Saskatchewan, Manitoba, Northwest Territories, Michigan, Wisconsin, Minnesota, and all five of the Great Lakes. Hayes published a number of papers based on this research data.

Physical description: Series contains approximately 34 centimeters of textual records, punched tape, and data cards.

Restrictions on access:

There are no access restrictions on this series.

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### **File: MS-2-695, Box 1, Folder 1 - Lake record books : [in Nova Scotia]**

Title: Lake record books : [in Nova Scotia]

Reference code: MS-2-695, Box 1, Folder 1

Date: 1959 (date of creation)

Scope and content:

17 record books which contain research data on Lake Ainslie, Amherst Golf Pond, Black Brook Lake, Bluff Lake, Boar's Back Lake, Copper Lake, Crowe's Mills Pond, Grand Lake, Lake Jesse, Lily Lake, Nappan Reservoir, Lakes O'Law, and [Dents] Punchbowl.

Physical description: 2.5 cm of textual records

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### **File: MS-2-695, Box 1, Folder 2 - Lake record books : [in New Brunswick]**

Title: Lake record books : [in New Brunswick]

Reference code: MS-2-695, Box 1, Folder 2

Date: [195?] (date of creation)

Scope and content:

3 record books which contain research data on Crecy Lake, Gibson Lake, and Kerr Lake.

Physical description: 0.5 cm of textual records

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**File: MS-2-695, Box 1, Folder 3 - Lake record books : [in Prince Edward Island]**

Title: Lake record books : [in Prince Edward Island]

Reference code: MS-2-695, Box 1, Folder 3

Date: [195?] (date of creation)

Scope and content:

3 record books which contain research data on Montague Pond, Pisquid Lake, and Southport Pond.

Physical description: 0.5 cm of textual records

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**File: MS-2-695, Box 1, Folder 4 - Lake record books : [in Manitoba, Northwest Territories, Ontario, and Saskatchewan]**

Title: Lake record books : [in Manitoba, Northwest Territories, Ontario, and Saskatchewan]

Reference code: MS-2-695, Box 1, Folder 4

Date: [195?] (date of creation)

Scope and content:

4 record books which contain research data on Great Slave Lake, Lac la Ronge, Lake of the Woods, and Lake Winnipeg.

Physical description: 0.6 cm of textual records

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**File: MS-2-695, Box 1, Folder 5 - Lake record books : [in Michigan]**

Title: Lake record books : [in Michigan]

Reference code: MS-2-695, Box 1, Folder 5

Date: 1959 (date of creation)

Scope and content:

14 record books which contain research data on Big Portage Lake, Burke Lake, Doyle Lake, Ford Lake, Hemlock Lake, Lost Lake, Lake Peter, Lake Paul, North Twin Lake, Section Four Lake, South Twin Lake, Sugar Loaf Lake, Third Sister Lake, and West Lost Lake. Data was also collected at the airport in Marquette County.

Physical description: 2 cm of textual records

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**File: MS-2-695, Box 1, Folder 6 - Lake record books : [in Wisconsin]**

Title: Lake record books : [in Wisconsin]

Reference code: MS-2-695, Box 1, Folder 6

Date: 1959 (date of creation)

Scope and content:

16 record books which contain research data on Allen Lake, Big Muskellunge Lake, Boulder Lake, Cather Lake, Crystal Lake, Helmet Lake, Little John Lake, Long Lake, Mary Lake [Henrici and McCoy], Trout Lake, Turk Lake, Lake Wingra, Lake Waubesa, Weber Lake [Firefly Lake, and West Twin Lake.

Physical description: 2.5 cm of textual records. - 10 record books are marked "Bact not fish."

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**File: MS-2-695, Box 1, Folder 7 - Lake record books : [in the Great Lakes]**

Title: Lake record books : [in the Great Lakes]

Reference code: MS-2-695, Box 1, Folder 7

Date: [1959?] (date of creation)

Scope and content:

5 record books which contain research data on Lake Superior, Lake Michigan, Lake Ontario, Lake Huron, and Lake Erie.

Physical description: 0.8 cm of textual records

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**File: MS-2-695, Box 1, Folder 8 - Lake record book : [in Minnesota]**

Title: Lake record book : [in Minnesota]

Reference code: MS-2-695, Box 1, Folder 8

Date: 1959 (date of creation)

Scope and content:

1 record book which contains research data on Lake Alexander.

Physical description: 0.2 cm of textual records

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**File: MS-2-695, Box 1, Folder 9 - Research data on Nova Scotia lakes visited by Anthony Hayes**

Title: Research data on Nova Scotia lakes visited by Anthony Hayes

Reference code: MS-2-695, Box 1, Folder 9

Date: 1958 (date of creation)

Physical description: 6 pages + 21 index cards + 1 small notebook

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**File: MS-2-695, Box 1, Folder 10 - A comparison of [residue on evaporation, also called] total solids [and] carbonate hardness as calcium carbonate to see how well Ransom's total hardness can be used to predict total alkalinity**

Title: A comparison of [residue on evaporation, also called] total solids [and] carbonate hardness as calcium carbonate to see how well Ransom's total hardness can be used to predict total alkalinity

Reference code: MS-2-695, Box 1, Folder 10

Date: 1962 (date of creation)

Physical description: 1 pages

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**File: MS-2-695, Box 1, Folder 11 - Water analysis conversion factors**

Title: Water analysis conversion factors

Reference code: MS-2-695, Box 1, Folder 11

Date: [1962?] (date of creation)

Physical description: 1 pages

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**File: MS-2-695, Box 2, Folder 4 - Computer tapes for fish productivity and bacteria papers**

Title: Computer tapes for fish productivity and bacteria papers

Reference code: MS-2-695, Box 2, Folder 4

Date: 1962 (date of creation)

Physical description: 7 small boxes of punched tape.

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**File: MS-2-695, Box 2, Folder 5 - Lake productivity data**



Title: Lake productivity data

Reference code: MS-2-695, Box 2, Folder 5

Date: [195?] (date of creation)

Physical description: 103 computer cards. - 1 index card.

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**File: MS-2-695, Box 2, Folder 6 - Lake fish data cards and related correspondence**

Title: Lake fish data cards and related correspondence

Reference code: MS-2-695, Box 2, Folder 6

Date: [195?] (date of creation)

Physical description: ca. 130 cards.

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**File: MS-2-695, Box 3, Folder 1 - Calculations of fish production [in] various trophic levels and in relation to depth : research for 1956 productivity paper**

Title: Calculations of fish production [in] various trophic levels and in relation to depth : research for 1956 productivity paper

Reference code: MS-2-695, Box 3, Folder 1

Date: 1955-1956 (date of creation)

Physical description: 16 pages. - 3 small notebooks. - 1 index card.

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**File: MS-2-695, Box 3, Folder 2 - Areas and depths of lakes : calculations and grouped data for 1956 productivity paper**

Title: Areas and depths of lakes : calculations and grouped data for 1956 productivity paper

Reference code: MS-2-695, Box 3, Folder 2

Date: 1955-1956 (date of creation)

Physical description: 76 pages

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**File: MS-2-695, Box 3, Folder 3 - Areas and depths of lakes used for productivity paper**

Title: Areas and depths of lakes used for productivity paper

Reference code: MS-2-695, Box 3, Folder 3

Date: 1956 (date of creation)

Physical description: 3 cm of textual records

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**File: MS-2-695, Box 3, Folder 5 - Bottom fauna calculations and related correspondence : research data used for 1956 productivity paper**

Title: Bottom fauna calculations and related correspondence : research data used for 1956 productivity paper

Reference code: MS-2-695, Box 3, Folder 5

Date: 1955 (date of creation)

Physical description: 18 pages. - 2 small notebooks. - Some pages are sticking together.

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**Series: Correspondence of F. Ronald Hayes**

Title: Correspondence of F. Ronald Hayes

Date: 1954-1962 (date of creation)

Scope and content:

Series contains correspondence regarding freshwater lakes.

Physical description: 3 cm of textual records

Related material:

Some additional correspondence is included in the Fish and bacterial research files series and the Laboratory experiments and teaching materials series.

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**File: MS-2-695, Box 1, Folder 12 - Correspondence with Dr. D.G. Frey regarding lakes in Wisconsin**

Title: Correspondence with Dr. D.G. Frey regarding lakes in Wisconsin

Reference code: MS-2-695, Box 1, Folder 12

Date: 1954 (date of creation)

Physical description: 3 pages

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**File: MS-2-695, Box 3, Folder 4 - Correspondence regarding lake depths and fish production**

Title: Correspondence regarding lake depths and fish production

Reference code: MS-2-695, Box 3, Folder 4

Date: 1954-1962 (date of creation)

Physical description: 69 pages

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**Series: Laboratory experiments and teaching materials**

Title: Laboratory experiments and teaching materials

Date: 1950s (date of creation)

Scope and content:

Series contains experiments, lesson plans, lists of references, and correspondence from Hayes' teaching activities.

Physical description: 10 cm of textual records

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**File: MS-2-695, Box 1, Folder 13 - Tissue respiration experiment**

Title: Tissue respiration experiment

Reference code: MS-2-695, Box 1, Folder 13

Date: [1950s] (date of creation)

Physical description: 2 pages

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**File: MS-2-695, Box 1, Folder 14 - Physiology laboratory experiments**

Title: Physiology laboratory experiments

Reference code: MS-2-695, Box 1, Folder 14

Date: 1939-[195?] (date of creation)

Physical description: 47 pages

Related material:

See file 1-15 for an off-print that was originally filed with these experiments.

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**File: MS-2-695, Box 2, Folder 1 - Experiments, lesson plans, and correspondence regarding a proposed development project on Quinpool Road in Halifax, Nova Scotia**

Title: Experiments, lesson plans, and correspondence regarding a proposed development project on Quinpool Road in Halifax, Nova Scotia

Reference code: MS-2-695, Box 2, Folder 1

Date: [1950s] - 1974 (date of creation)

Physical description: 19 pages. - + 5 photographs : b&w ; 3 x 20 cm and smaller.

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### **File: MS-2-695, Box 2, Folder 2 - Colloidal solutions**

Title: Colloidal solutions

Reference code: MS-2-695, Box 2, Folder 2

Physical description: 6 pages. - 20 negatives : b&w ; 5 x 5 cm and smaller. - 1 photograph : b&w ; 20 x 25 cm. - 14 photographs : b&w ; 9 x9 cm and smaller

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### **File: MS-2-695, Box 2, Folder 3 - Experiments on reflexes and sense organs**

Title: Experiments on reflexes and sense organs

Reference code: MS-2-695, Box 2, Folder 3

Date: [197?] (date of creation)

Physical description: 2 pages

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### **File: MS-2-695, Box 3, Folder 9 - Zoology 5 reserve materials**

Title: Zoology 5 reserve materials

Reference code: MS-2-695, Box 3, Folder 9

Date: 1947-[195?] (date of creation)

Physical description: 12 pages. - 3 off-prints.

Related material:

See the Publications series for additional off-prints.

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### **Series: Publications**

Title: Publications

Date: 1939 (date of creation)

Scope and content:

Series contains off-prints of articles written or translated by Hayes.

Physical description: 3 cm of textual records

Related material:

See File 3-9 for additional off-prints.

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**File: MS-2-695, Box 1, Folder 15 - A pipette for the micro estimation of respiratory gases / by Frederick Ronald Hayes**

Title: A pipette for the micro estimation of respiratory gases / by Frederick Ronald Hayes

Reference code: MS-2-695, Box 1, Folder 15

Date: 1939 (date of creation)

Scope and content:

This article was published in the Proceedings of the Nova Scotia Institute of Science (Vol. 19, Part 4)

Physical description: 16 pages

Related material:

This off-print was originally filed with physiology laboratory experiments filed in folder 1-14.

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**File: MS-2-695, Box 3, Folder 6 - Über chemische und kolloidchemische vorgänge in eisen-phosphat-systemen unter limnochemischen und limnogeologischen Gesichtspunkten = On the chemical and colloid-chemical reactions in iron-phosphate systems from the standpoint of limnochemistry and limnogeology / Wilhelm Einsele ; translated by F. Ronald Hayes**

Title: Über chemische und kolloidchemische vorgänge in eisen-phosphat-systemen unter limnochemischen und limnogeologischen Gesichtspunkten = On the chemical and colloid-chemical reactions in iron-phosphate systems from the standpoint of limnochemistry and limnogeology / Wilhelm Einsele ; translated by F. Ronald Hayes

Reference code: MS-2-695, Box 3, Folder 6

Date: 1938-1952 (date of creation)

Physical description: 27 pages

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**File: MS-2-695, Box 3, Folder 7 - Contributions to the study of marine gastropods : the physical factors, behaviour, and intertidal life of Littorina [off-print] / J. Nelson Gowanloch and F. Ronald Hayes**

Title: Contributions to the study of marine gastropods : the physical factors, behaviour, and intertidal life of Littorina [off-print] / J. Nelson Gowanloch and F. Ronald Hayes

Reference code: MS-2-695, Box 3, Folder 7

Date: 1926 (date of creation)

Physical description: 39 pages

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**File: MS-2-695, Box 3, Folder 8 - Utilization of phosphorus in trout as studied by injection of radioactive phosphorus [off-print] / F. Ronald Hayes and L.H. Jodrey**

Title: Utilization of phosphorus in trout as studied by injection of radioactive phosphorus [off-print] / F. Ronald Hayes and L.H. Jodrey

Reference code: MS-2-695, Box 3, Folder 8

Date: 1952 (date of creation)

Physical description: 6 pages

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