

Mandatory information

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2021–2022 Agricultural Research Institute of Ontario annual report

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About Agricultural Research Institute of Ontario (ARIO)

The Agricultural Research Institute of Ontario (ARIO) is classified under the Agencies and Appointments Directive as a Board Governed Operational Service Agency reporting to the Minister of Agriculture, Food and Rural Affairs. ARIO was created in 1962 by the *Agricultural Research Institute of Ontario Act* (ARIO Act). Through the *ARIO Act*, ARIO seeks to enable and ensure Ontario maintains its competitive advantage in agri-food research and innovation and concentrates ARIO's efforts in four ways:

- providing strategic advice to the minister on agri-food research and innovation
- implementing the ARIO infrastructure strategy to modernize the province's agri-food research and innovation physical and virtual infrastructure
- promoting the Ontario agri-food research and innovation system

- providing administrative and managerial oversight of open research programs, and the 14 ARIO-owned research properties (that include over 5,600 acres, over 200 buildings with a book value of \$102,570,558 million and various tenants including government, academia, not-for-profit and commercial private-sector organizations)

Vision

ARIO's mission is to globally lead the agri-food sector, empowered by transformational research and innovation.

Mission

ARIO is a trusted, authoritative, credible body to the minister on:

- research and infrastructure partnerships and programs
- optimizing and leveraging the research infrastructure owned by ARIO
- driving research into action, evaluating and communicating the value of research
- to foster a prosperous, sustainable and resilient agri-food and rural economies

Four strategic pillars

1. Advise: Provide bold, informed strategic advice to the Minister on transformative, high-impact and diverse agri-food research and innovation.
2. Promote: Communicate Ontario's agri-food research opportunities and successes.
3. Transform: Establish partnerships to deliver transformational research.
4. Leverage: Ontario's research and innovation infrastructure is world leading and assets are leveraged to maximize benefits for the agri-food sector.

2021: A year in review

A message from the Chair, Dr. Lorne Hepworth

I am pleased to share the 58th annual report of the Agricultural Research Institute of Ontario (ARIO). ARIO continues to deliver on its key mandate while remaining strongly aligned with the Government of Ontario's goals and priorities despite the continued challenges that have arose while the province responds to and recovers from COVID-19.

In the context of the COVID-19 pandemic, climate change pressures and the rise in inflation, ARIO's advisory role to the Minister of Agriculture, Food and Rural Affairs remains central to province's global leadership in driving innovative research forward for a resilient agri-food system.

Keystone to enabling this work, is ARIO's infrastructure renewal strategy and the Institute's continued oversight of the province's long-term investment in modern research platforms.

Together with industry partners, the academic and research community and Indigenous community partners, ARIO has continued to advance key components of its research infrastructure renewal strategy and built strong partnerships across the agri-food value chain.

In the fiscal year 2021-2022, five ARIO member meetings were held. During these meetings, ARIO members have provided leadership and advice on key strategies, policy, research priorities and projects which include:

- ARIO's Strategic Plan 2030
- ARIO infrastructure strategy 2.0
- Intellectual Property (IP) Strategy
- *ARIO Act* Modernization
- Innovation and Technology Strategy
- Research Ecosystems Strategy

These co-related strategies and activities work to advance government efforts to promote a competitive and productive agri-food sector and to provide economic growth and opportunities in the province and rural communities in Ontario.

Looking ahead to the 2022-2023 fiscal year, modernization of core research capacity and platforms in several key sectors ranging from livestock and field crops to greenhouse and aquaculture remains at the core of the ARIO's plans.

In line with the province's commitment to break down systemic barriers and advance racial equity, ARIO will also make strides towards embedding equity, diversity and inclusion principles in its work to build diverse and inclusive activities with equitable outcomes. Another key project in 2022-2023 that will enhance ARIO's ability to provide strategic advice is the Research Ecosystems Project. The project will entail a review and synthesis of the Ontario agri-food and rural research system to provide operational intelligence to optimize research programming and deliver greater impact with ministry and/or client funded research.

The agri-food sector is central to Ontario's economic strength and success, and we continue to be excited about the long-term investments in infrastructure and transformative research for Ontario's agri-food future.

Sincerely,

Dr. Lorne Hepworth

Chair, Agricultural Research Institute of Ontario

ARIO governance

ARIO Director of Research, Greg Wootton

The ARIO Director of Research is appointed by the Minister under the *ARIO Act* and has responsibilities related to ARIO's business affairs. Operational decision-making and approvals are made by the ARIO Director of Research, or their authorized delegate(s). The Director of Research is the Assistant Deputy Minister of Research and Corporate Services Division in the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

ARIO Chair, Dr. Lorne Hepworth

The Chair, acting on behalf of the members, is accountable to the Director of Research for the Agency's performance in fulfilling its mandate and for carrying out the roles and responsibilities assigned to the members and Chair by the *ARIO Act*, the Memorandum of Understanding, and applicable Treasury Board/Management Board of Cabinet and Applicable Government Directives.

ARIO Comptroller, Sue Mihelchic

The Comptroller is appointed by and is responsible to the ARIO Director of Research.

ARIO Secretariat, Ontario Ministry of Agriculture, Food and Rural Affairs, Research and Innovation Branch

ARIO Secretariat is accountable to the ARIO Director of Research for fulfilling the operational and administrative requirements of the Agency, and to the Ministry Liaison in supporting the ministry's requirements of the Agency.

The ARIO secretariat is comprised of OMAFRA employees within the Research and Innovation Branch including:

- Jen Liptrot, Director, Research, and Innovation Branch
- Kelli Rice, Manager, Research Accountability, Management, and Administration Unit
- Adam Meyer, Manager, Research and Knowledge Management Unit

ARIO members

ARIO is comprised of up to fifteen members who reflect the broad-based nature of Ontario's agri-food and agri-tech industry such as farmers, agri-businesses, rural partners and researchers. ARIO members are appointed by the minister. The ARIO Chair recommends candidates for appointment to the ARIO to ensure a strong mix of skills, experience and perspectives. Members are appointed for three-year terms and may be reappointed.

The ARIO membership has been growing during the past couple of years. There are currently 11 members and one ex-officio from the Agriculture and Agri-Food Canada (AAFC). The Director General from AAFC serves to contribute a federal perspective on research activities across Canada.

Table 1: 2021-2022 ARIO members

2021-22 ARIO members	Appointment date	Expiry date	Per diem remuneration
Dr. Lorne Hepworth (Chair)	Jan. 18, 2019	Jan. 25, 2025	\$221
Ms. Rose Marie Gage (Vice-Chair)	Mar. 9, 2018	Mar. 8, 2024	\$184
Ms. Jennifer Doelman	Mar. 8, 2021	Mar. 7, 2024	\$168
Denise Hockaday	July 8, 2021	July 7, 2024	\$168
Mr. David Jenkins	Nov. 30, 2020	Nov. 29, 2023	\$168
Mr. Nevin McDougall	Nov. 30, 2020	Nov. 29, 2023	\$168
Mr. David McInnes	Nov. 30, 2020	Nov. 29, 2023	\$168
Dr. Gordon Surgeoner	Jun. 2, 2005	Mar. 12, 2025	\$168
Mr. Evert Veldhuizen	Jan. 2, 2019	Jan. 1, 2025	\$168
Mr. Ken Wall	Dec. 7, 2020	Dec. 6, 2023	\$168
Dr. Youbin Zheng	Jan. 21, 2021	Jan. 20, 2024	\$168
Dr. Pascal Michel, Director General, Agriculture and Agri-Food Canada Ex-officio representative	n/a	n/a	n/a

ARIO mandate letter 2021-2022

In the ARIO 2020-2021 mandate letter, the Minister of Agriculture, Food and Rural Affairs outlined expectations and direction for ARIO in the year ahead. The work completed by members to establish the goals, objectives and strategic direction ensured that ARIO continued to support research and innovation in the agri-food sector and drive economic growth, jobs and sustainability in Ontario. As part of the government of Ontario, agencies are expected to act in the best interests of Ontarians by being efficient, effective and providing value for money to taxpayers. This includes:

Competitiveness, sustainability and expenditure management

- operating within your agency's allocations
- identifying and pursuing opportunities for revenue generation, innovative practices and/or improved program sustainability
- identifying and pursuing efficiencies and savings
- complying with applicable direction related to supply chain centralization, Realty Interim Measures and Agency Office Location Criteria

Transparency and accountability

- abiding by applicable government directives and policies and ensuring transparency and accountability in reporting
- adhering to requirements of the Agencies and Appointment Directive and responding to audit findings, where applicable
- identifying appropriate skills, knowledge and experience needed to effectively support the board's role in agency governance and accountability

Risk management

- developing and implementing an effective process for the identification, assessment and mitigation of risks, including planning for and responding to emergency situations such as COVID-19 and Avian Influenza

Data collection

- improving how the agency uses data in decision-making, information sharing and reporting, including by leveraging available or new data solutions to inform outcome-based reporting and improve service delivery
- supporting transparency and data sharing with the ministry, as appropriate

Digital delivery and customer service

- exploring and implementing digitization or digital modernization strategies for the provision of services online and continuing to meet and exceed customer service standards through transition
- using a variety of approaches or tools to ensure service delivery in all situations, including COVID-19

Property management

- continuing to provide value for money in effectively owning and managing the Province of Ontario's agri-food research facilities and infrastructure
- continuing to provide advice on a long-term strategic plan for the province's agri-food research infrastructure and recommendations on strategies to continue investments in research infrastructure within the current fiscal limitations
- continuing to revitalize the province's agri-food research infrastructure necessary to support innovative research and the long-term sustainability and growth of the agri-food sector in Ontario by developing state of the art, integrated research infrastructure capacity built on shared funding models and partnerships between industry and government

Strategic advice

- continuing to provide strategic advice to the Minister and the ministry on current research issues and priorities that contribute to prosperous, competitive and sustainable agricultural and food sectors and rural communities in Ontario
- providing advice to support research that is responsive to the changing needs of the sector, especially as the province recovers from COVID-19
- providing strategic advice to the Minister and the ministry on the long-term research needs that will enable the agriculture and food sectors to remain a global leader in years to come
- reviewing the *ARIO Act* and provide recommendations that would modernize the Act

Promotion and advocacy of Ontario's agri-food and agri-products research and innovation system

- advocating for the value of OMAFRA's agriculture research and commercialization system through focused outreach opportunities, building relationships between ARIO and industry stakeholders to broaden awareness, engage and seek support for research and innovation priorities and the research infrastructure renewal needed to maintain and strengthen Ontario's local, national and global competitiveness

- continuing to communicate the value and return on investment for ARIO infrastructure and the research system it supports

Efficient and effective administration

- continuing sourcing secretariat services from OMAFRA that provide effective and efficient administration of ministry open research programs, timely and accurate financial operations and reporting and all aspects of property management and capital revitalization
- providing recommendations on new agency members to support robust strategic advice and the delivery of the ARIO mandate
- continuing to meet all Agency Accountability Directive (AAD) provisions and requirements

Chair and Director of research report

We are pleased to provide an update and some highlights from the 2021-22 fiscal year for the Agricultural Research Institute of Ontario and its continuing support of agri-food research and innovation in Ontario.

Research Infrastructure Strategy

ARIO's research Infrastructure Strategy provides a plan for the renewal and modernization of Ontario's network of 14 agri-food research stations. Implementation of the ARIO Infrastructure Strategy is resulting in the establishment of renewed and modernized, multi-disciplinary research and innovation platforms focused on consumer, market and economic outcomes.

Benefits include the creation of new and value-added products, developing solutions to current and emerging issues and validating new technologies, processes and approaches to Ontario conditions.

A cornerstone of ARIO's Infrastructure Strategy is industry engaging directly with government and academia to address the highest research priorities and needs of the Ontario agri-food sector. Modernized infrastructure enables scientific excellence, knowledge dissemination and industry adoption, all of which are necessary to the economic growth of the agri-food and agri-products sector for the province.

ARIO continues to plan and make strategic infrastructure investments through the ARIO infrastructure strategy. The strategy is supported by industry who provides capital dollars to projects (typically 20%) and is guided by two key pillars which seek to renew and modernize research infrastructure, as well as drive operational efficiencies across the research station portfolio through consolidations of facilities and livestock.

2021-22 Major capital project highlights:

[Ontario Crops Research Centre - New Liskeard - Agronomy service building](#)

This build supports field crops research needs in northern Ontario and is an important node in the province's comprehensive field crops research infrastructure complement supporting field crops research in all regions of the province.

Construction of Ontario Crops Research Centre in New Liskeard was ongoing throughout 2021-2022. Completion of the project is anticipated by 2022 and will allow for the consolidation of field research operations on the eastern portion of the New Liskeard property.

[Ontario Crops Research Centre - Ridgeway - Field crop service building](#)

This build supports field crops research needs in southwestern Ontario while allowing ARIO to dispose of a wide range of older field crops buildings within the ARIO portfolio. It serves as another important node in the

provinces comprehensive field crops research infrastructure complement supporting field crops research in all regions of the province.

Construction of the Ontario Crops Research Centre at Ridgetown Campus commenced in September 2020. The tender was delayed to Summer 2020 due to uncertainties related due to the COVID-19 pandemic. The project is now substantially complete. Staff and faculty moved into the facility in early 2022.

Ontario Swine Research Centre - Elora

In early fall 2021, the ARIO and Ontario Pork commenced construction of a new swine research centre at the Elora Research Station.

The new centre at Elora will replace the present facilities at Arkell which were constructed in the early 1980s and are well past their useful lifecycle, costly to operate and difficult to retrofit due to age. The planned research facilities will more closely resemble the current state of industry production taking place in Ontario, leading to better applied research outcomes for the sector. Completion of the project is expected in spring 2023.

Guelph Turfgrass Institute

The new Guelph Turfgrass Institute (GTI) was completed in 2021-22 and is located within the University of Guelph Arboretum. This new GTI replaced the Frost Centre facilities at the former Guelph Research Station. The Guelph Research Station was part of ARIO's property dispositions in 2021. The new GTI will continue to conduct research on turfgrass production and management for the benefit of members in the Canadian turfgrass industry.

Ontario Beef Research Centre - Elora

The construction of a new feed-lot facility commenced in 2020-21 and was completed in the summer of 2021. The new feed lot with advanced digital feeding systems will assist in advancing the Ontario beef industry's knowledge around precision feeding which will improve nutrition, result in less feed waste and lead to processes advancing fewer days to market for feeder cattle.

The establishment of new beef research facilities at Elora Research Station has allowed the ARIO to dispose of several older beef buildings no longer suitable for modern research, which are costly to operate and maintain due to their age obsolescence.

Property management

The University of Guelph and the Vineland Research and Innovation Centre (VRIC), in addition to providing program delivery, have operated the ARIO-owned research stations and provided property management

services under agreements with OMAFRA and ARIO, including the implementation of the Minor Capital Program.

Vineland Research and Innovation Centre

The ARIO-owned Vineland Research Station is managed by VRIC who is an independent, not-for-profit, horticultural research and innovation centre created in 2007. VRIC is led by an independent board comprised of leading industry representatives.

VRIC's vision is to "be recognized as Canada's leader in horticulture research and innovation." This is supported by VRIC's mission to "improve the economic viability, sustainability and competitiveness of horticulture in Canada." Their mission is supported through the provision of vital applied research, innovation and commercialization activities focused on the needs of Ontario's horticulture industry. The resulting value proposition to Canada and the horticultural sector is to strengthen Canadian companies by making them globally competitive through the application of Vineland supported innovation.

VRIC works across the value-chain to align horticultural research and innovation activity in Ontario and has established infrastructure and innovation capacity in five areas:

- consumer, sensory and market insights
- plant variety development
- automation
- plant responses and the environment
- biological

crop protection

For example, to support technology development and adoption in horticulture, VRIC is working with stakeholders to develop four Technology Roadmaps for subsectors such as berries, processing vegetables, asparagus and northern agriculture.

OMAFRA, ARIO and VRIC staff frequently collaborate on research projects and industry initiatives including collaborating with staff from the Agriculture Development Branch (ADB) on specific projects related to their specialty commodities, such as sweet potatoes, pest management, greenhouse tomatoes, hazelnuts, tender fruit and most recently on long-cane raspberries.

Minor Capital Program

The ARIO Minor Capital Program (MCP) is an ongoing multi-year program that allocates funds across the ARIO property portfolio to support significant investments in addressing maintenance, upgrades, program related systems, equipment and building/site infrastructure. The MCP is in line with ARIO's broader infrastructure strategy to target development and renewal of ARIO's core research infrastructure, and to support the move away from aging infrastructure by creating operational efficiencies through consolidation and co-locations to reduce the overall footprint of the research stations.

Criteria for determining MCP needs on an annual basis is guided by priority areas such as human health and safety, animal health and welfare, code compliance, building integrity, life cycle replacement, efficiency and conservation and program capacity (maintain or improve) that affect building and program operations across the network of ARIO properties.

Annual minor capital plans are submitted to ARIO by the University of Guelph and VRIC and approved at the beginning of each fiscal year outlining the priority projects for each research station. These projects can be completed throughout the fiscal year or can cover multiple fiscal years depending on the size and scope of the project.

The program is funded through an annual transfer payment from OMAFRA to ARIO.

2021-2022 Minor Capital Project highlights:

Laboratory and storage cooler upgrades at the Ontario Crops Research Centre - Simcoe

The Simcoe Research Station project was comprised of the renovation of the laboratory including the replacement of sample storage coolers. An update of the facility auditorium (conference room) was also completed to replace worn finishes and to improve lighting and storage. Labs were modernized to provide

improved functionality, ventilation and finishes that will improve efficiency and reliability of infrastructure in support of horticulture research programs at the station.

The project was complete as of May 2021. The total project cost was approximately \$3.5 million over three years.

Pasture Upgrades at the Ontario Beef Research Centre (OBRC) - Elora

The OBRC pasture project nearly doubled the available pasture at Elora through pasture expansion and revitalization. Pasturelands now total 300 acres.

New fencing was added for optimal and reproducible trials. Paddocks now feature frost-free hydrants, underground waterlines and suitable drainage that improves the efficiency of delivering water to grazing cattle. Two new handling facilities with hydraulic chutes were added. The location of these facilities eases the research process and supports animal welfare because animals can be assessed at the pasture site and can forego the stress of transit to the main research centre.

The total project cost was \$3 million over four years (\$1.75 million in 2021-22).

Research programs

OMAFRA's open research programs, New Directions and Food Safety, previously administered by ARIO, were replaced in 2019-2020 by the Ontario Agri-Food Research Initiative (OAFRI), funded through the Canadian Agricultural Partnership (CAP). This initiative combines and builds on the success of the former New Directions and Food Safety research programs. Priorities for the 2020-2021 application year were: food safety, plant health and protection and sustainable production systems. 21 research projects were funded as a result of the 2020-2021 OAFRI call. In 2021-2022, OAFRI launched two pilot calls, Knowledge Translation and Transfer and commercialization projects.

Research priority setting

OMAFRA continues to deliver on the government's agenda contributing to jobs and investment, environment and climate change and safe food and public assurance. To support delivery, the Research Agenda provides the overarching framework for the ministry's research investment, aligned with OMAFRA's core businesses to clearly link research priority areas to outcomes we are trying to achieve under each core-business, based on integrated advice from across the ministry.

As a foundational framework, the 11 research agenda priority areas are meant to remain static, however, research focus areas and research questions thereunder are reviewed annually and updated accordingly as part of the annual research priority setting cycle. ARIO provides advice to the Minister on strategic direction

for research priority setting. This includes providing advice to the Minister on emerging research issues and opportunities to drive the development of Ontario as a global leading agri-food sector.

OMAFRA's research agenda informs a range of ministry programming that spans across the research and innovation continuum. Program levers allow engagement of different partners with a diverse range of expertise and is flexible to support varied degrees of intervention, directedness and specificity of priorities. This is a long-term strategy that fosters and creates space for innovation and research to occur.

Research priorities	Number of proposals awarded (2020-2021)
Animal health and welfare	15
Competitive production systems	11
Food safety	1
Plant health and protection	6
Productive land capacity	2
Soil health	1
Sustainable production systems	12
Water quality and quantity	2
Total	50

Table 2: Data from the University of Guelph's 2020-2021 consolidated annual report. The 2021-2022 data is not yet available.

Knowledge Translation and Transfer

A key part of ARIO-supported research is Knowledge Translation and Transfer (KTT) programming, which takes the results of provincial research and innovation investments that have generated new knowledge and drives the use of that new knowledge to yield real impacts in the sector and positively influence business decisions. Every Ontario Agri-Food Innovation Alliance and Ontario Agri-Food Research Initiative research program proposal is required to have a KTT plan which identifies key target audiences for research outcomes and outlines methods of engagement to share research processes and results with industry stakeholders. KTT plans continue to be monitored annually by OMAFRA staff to ensure that the plans are implemented successfully. This process helps drive results into action faster and enables the agri-food sector to hear directly from researchers.

Both directly and through delivery partners, OMAFRA and ARIO have adapted to the COVID-19 environment and continued to deliver the intended knowledge dissemination services both internally and externally through virtual products and events. The shift to virtual delivery has allowed both the sustainability of strategically planned activities and in some cases, expanded the number of activities able to be performed and the reach of these activities to broader audiences, reaching those we might have otherwise not been able to.

Externally, KTT activities pivoted from the usual in-person audience style events to virtual conferences utilizing a variety of delivery platforms. Some examples of this include a KTT capacity-building event titled “Mobilizing Knowledge in Ontario’s Agri-Food Sector and Rural Communities: A University of Guelph-OMAFRA Knowledge Exchange Event” (240 attendees) and a One Health focused research forum titled “Livestock and One Health Forum Advancing Multidisciplinary Research” (221 participants). The Research in Action Webinar Series also continued throughout the last year. Since initiation in 2020, the series has now held 17 sessions with average attendance of 75 OMAFRA staff who are now better informed of ongoing OMAFRA-funded research projects. Survey results from all events were positive and webinar delivery was received successfully.

Access to ARIO research infrastructure

Researchers continue to leverage the ARIO network of research stations through the Ontario Agri-Food Innovation Alliance. University of Guelph researchers are provided subsidized access to the ARIO research stations to enable a broad spectrum of research across the agri-food sector and to deliver on the province’s research priorities (for example, Tier 1 research). Tables 3-7 contain examples of 2020-21 Tier 1 research being delivered at ARIO research stations.

Lead applicant	Project title	Ministry priority
Cathy Bauman	Penicillin Depletion Study in Dairy Sheep: determining milk withholding time for an on-label claim	Animal health and welfare
Eduardo De Souza Ribeiro	Supplementation of omega-3 fatty acids as a nutraceutical strategy to control postpartum inflammation and enhance production efficiency and fertility in dairy cows	Competitive production systems
Ron Johnson	Depletion of Dexamethasone in Cattle: Food Safety Study in Dairy and Beef Cattle	Food safety
Mehrzad (Milad) Eskandari	Genetic Dissection of the Resistance to Soybean Cyst Nematode (SCN) using Advanced	Plant health and protection
Sara Epp	Assessing Land Use Planning Tools to Mitigate Odour and Lighting Nuisances Related to Cannabis Production	Productive land capacity
Asim Biswas	Effect of land conversion on soil carbon and nutrient dynamics in the Great Clay Belt of Northern Ontario: Digital soil mapping approach	Soil health
Joshua Nasielski	Increasing lodging resistance in oats for enhanced quality and yield	Sustainable production systems

Table 3: Data from the University of Guelph’s 2020-21 consolidated annual report. The 2021-2022 data is not yet available.

Research station capacity and utilization

Livestock research station	Capacity (Animal Research Day)	Research utilization (Animal Research h Day)	Research preparation (Animal Research h Day)	2020-2021 Utilization rate (%)
Arkell Equine Research Facility	11,680	11,315	365	100.0%
Arkell Swine Research Facility	156,950	49,212	14,600	40.7%
Ontario Aquaculture Research Centre	111,690	3,830	28,105	28.6%
Ontario Beef Research Centre – Elora	206,995	77,680	38,895	56.3%
Ontario Beef Research Centre – New Liskeard	164,250	0	27,375	16.7%
Ontario Dairy Research Centre	173,010	28,136	83,950	64.8%
Ontario Poultry Research Centre	3,923,750	1,350,334	335,800	43.0%
Ontario Sheep Research Centre	102,200	3,023	10,950	13.7%
Ponsonby General Animal Facility	100,375	17,095	21,900	38.8%
Total	4,950,900	1,540,625	561,940	44.7% (Total average)

Table 4: Data from the University of Guelph's 2021-2022 consolidated annual report

Metric	2018- 2019	2019-2020	2020-2021	2021-2022	2022-2023	Target
Average livestock research centre utilization rate	48.9%	50.5%	44.3%	44.7%	N/A	49%

Table 5: Data from the University of Guelph's 2021-2022 consolidated annual report

Crop research station	Capacity (plot area (ha))	Research utilization (plot area (ha))	Research preparation (plot area (ha))	2020-2021 utilization rate (%)
Bradford	2.06	1.62	0.00	78.4%
Cedar Springs	7.28	6.47	0.00	88.9%
Elora	154.35	56.25	95.51	98.3%
Emo	17.85	7.32	2.10	52.8%
Huron	42.90	20.23	20.23	94.3%

New Liskeard	51.31	14.45	11.37	50.3%
Ridgetown	96.32	39.66	52.61	95.8%
Simcoe	46.78	15.38	26.30	89.1%
Winchester	40.51	23.76	12.71	90.0%
Woodstock	58.88	17.40	27.11	75.6%
Total - crop stations	518.24	202.55	247.95	81.4% (Total average)

Table 6: Data from the University of Guelph's 2021-2022 consolidated annual report

Metric	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	Target
Average crops research centre utilization rate	78.1%	80.7%	78.1%	81.4%	N/A	78%

Table 7: Data from the University of Guelph's 2021-2022 consolidated annual report

Conclusion

This past year saw several milestone accomplishments related to the ARIO infrastructure strategy along with continued effective property management and research program delivery. Next year promises more of the same and we are very much looking forward to the year ahead. Finally, we would like to thank all those who support agri-food research and innovation across the province: industry, academia and the various levels of government.

Audited financial statements

[View ARIO's audited financial statements for 2021-2022](#)

