Census of Environment: Harvesting benefits from nature

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People receive many benefits from nature: food, timber, flood protection from salt marshes, and enjoyment of the natural environment. These are all examples of ecosystem services, which play a critical role in understanding the connection between people and ecosystems, and the potential impacts on human well-being when ecosystems change.

Provisioning services refer to the amount of organic material such as plants and fish harvested from ecosystems. For example, agroecosystems in Canada provide crops and forage, forests provide wood and wild harvested products, and marine, coastal and freshwater ecosystems provide fish and shellfish. These harvesting activities provide economic and social benefits to communities.

Provisioning services from commercial activities totalled 293 million tonnes in 2020, with 51% from agricultural ecosystems, 49% from forests, and 0.3% harvested from marine, coastal and freshwater ecosystems.

Agricultural ecosystems Forest ecosystems Coastal and marine ecosystems Freshwater ecosystems 0 50 100 150 200 million tonnes

Chart 1 Provisioning services by ecosystem type, 2020

Source(s): Table 38-10-0171-01.

More than two-thirds of crops produced in the Prairie provinces

In 2022, an estimated 137.5 million tonnes of crops and honey were harvested from farms for food, animal feed and industrial use.

Field crops, such as wheat, corn, canola, barley, and soybean accounted for 72% of crop provisioning in Canada, while hay and corn for silage accounted for 22%. The Prairie provinces accounted for 70% of total field crops (including corn for silage and tame hay) harvested in 2022, followed by Ontario (18%) and Quebec (9%).





Fruit and vegetable production in 2022 accounted for 6% of crop provisioning, with 41% of this production occurring in Ontario and Quebec.

Pastures, including sown pastures and semi-natural pastures, provide plants and grasses for livestock grazing, as well as environmental regulating services such as carbon sequestration, water purification and water flow regulation. Estimates of grazed plants and grasses from pastureland amounted to approximately 11 million tonnes in 2021. Alberta accounted for 44% of grazed plants and grasses, followed by Saskatchewan (35%). Semi-natural pastures with native grasses are particularly important for the maintenance of biodiversity.

Forests provide people with many important goods

The main commercial forest products harvested from forests and woodlands in Canada include timber and maple syrup. Timber harvests totalled approximately 142 million tonnes in 2020. British Columbia accounted for the largest share of the timber harvest (38%), followed by Alberta (21%) and Quebec (19%).

The majority of the world's supply of maple syrup comes from Canadian woodlands, mostly in Quebec—the primary maple syrup-producing province in Canada. In 2023, 63 kilotonnes of maple syrup were produced in Canada, a decrease of 40% compared with a year earlier. This significant decline in maple syrup production was mainly caused by severe storms and less-than-ideal temperatures for sap production in late winter and early spring.

Marine and freshwater harvests have been trending down since 2002

Commercial landings of fish and shellfish harvested from marine, coastal and freshwater ecosystems totalled 0.78 million tonnes in 2021, down from 1.1 million tonnes in 2002, with some fluctuation over the years. Over 90% of this total in 2021 came from wild harvests of marine fish and shellfish, the majority of which were brought to shore in the Atlantic provinces.

Canadian farmed shellfish production totalled 39 kilotonnes in 2021, up 41% from the previous year. Prince Edward Island accounted for 53% of total farmed shellfish product, followed by British Columbia (25%).

In 2021, the total catch from freshwater fisheries amounted to 25 kilotonnes, with Ontario contributing 46% of this total and Manitoba accounting for 38%.

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Note to readers

Statistics Canada's new Census of Environment program reports on ecosystems in Canada, providing information to help Canadians make evidence-based decisions to protect, rehabilitate, enhance, and sustain our environment. It follows the internationally accepted environmental–economic standard for producing information on ecosystems' extent, their condition and the services they provide.

Provisioning services encompass goods and materials supplied by ecosystems and include food, wood, water and fuels. Provisioning services is one of the categories of ecosystem services, which also include the regulating services and cultural services categories.

Data on ecosystem provisioning services are now available in a new table (38-10-0171). This table provides information on biomass provisioning services supply, by type of ecosystem and province and territory, starting in 2002. These estimates include commercial harvesting activities and exclude subsistence, recreational and cultural harvesting activities related to Indigenous food, social and ceremonial use.

For more information, see Canadian System of Environmental-Economic Accounting – Ecosystem Accounts (5331).

Definitions, data sources and methods: survey number 5331.

Available tables: table 38-10-0171-01.

The infographic "What does nature provide to Canadians?" is now available in the series *Statistics Canada – Infographics* (**11-627-M**).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).