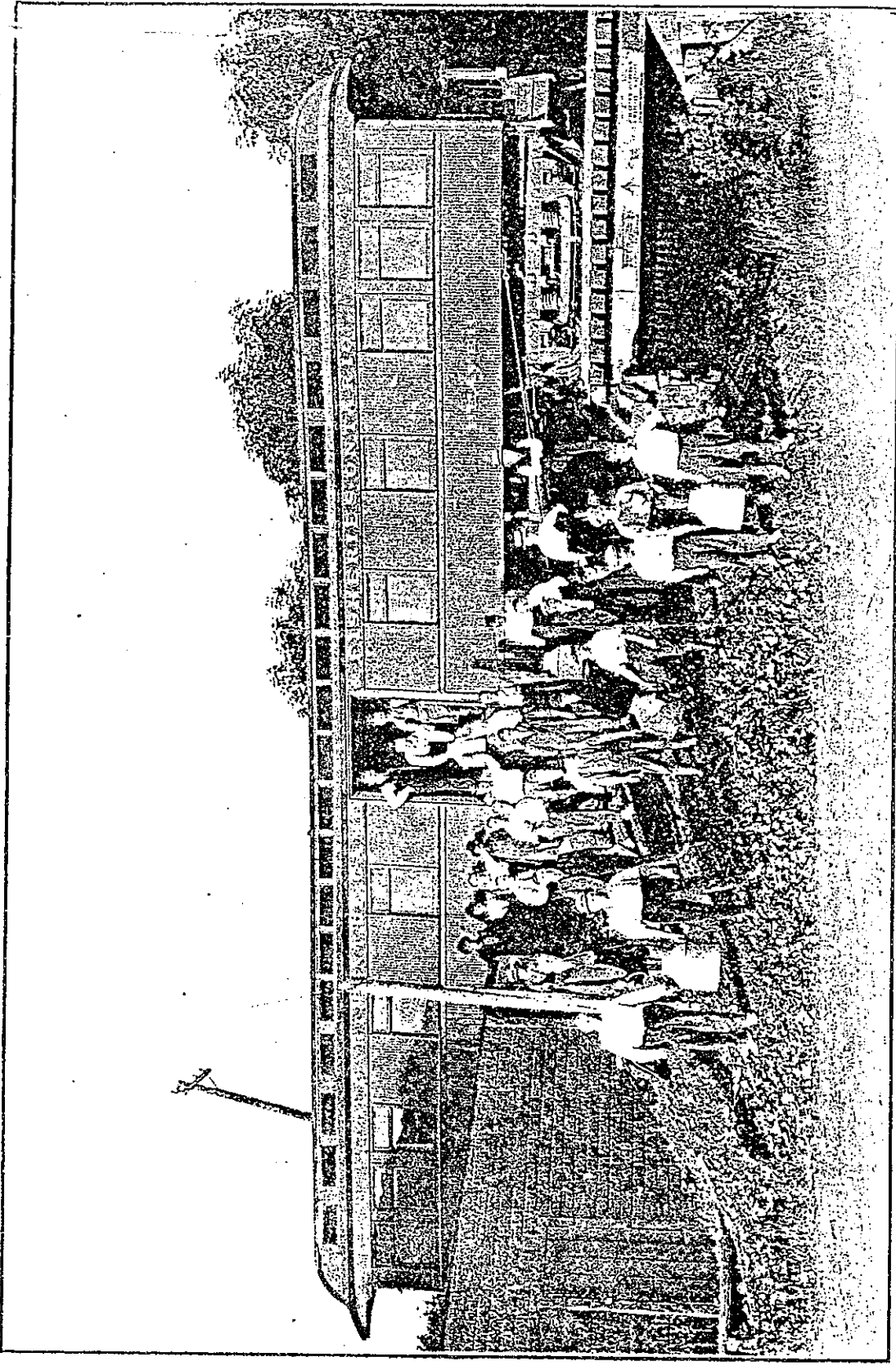


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Distributing Parent Bass by Tank Car.

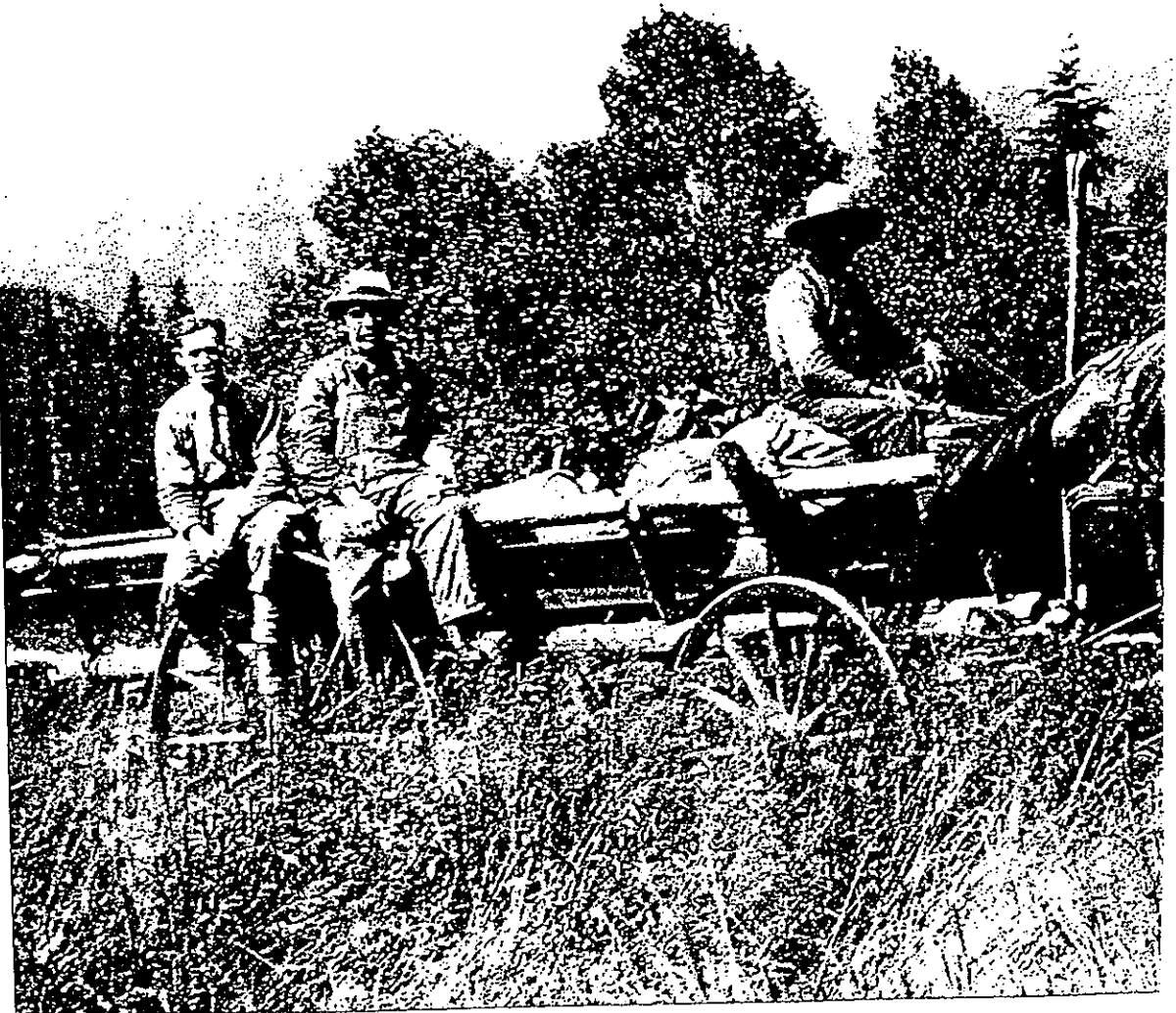
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ONTARIO SESSIONAL PAPERS

By Blair Dawson, Lantern slides from the Province of Ontario Picture Bureau

Railway bass



In the 1920s and '30s, the Ontario Department of Game and Fisheries (ODGF) cultured large numbers of fingerling bass at Normandale and Mount Pleasant hatcheries, among others, and later at Westport in eastern Ontario. Adult bass were also netted for transport to new waters. The department had its own railway car for fish transport, and it planted bass from one side of the province to the other, seemingly with little thought as to suitability of habitat. Since then, illegal non-government bass introductions and natural dispersal have blurred the initial railway-introduction trail.

Smallmouth and largemouth bass were naturally distributed across the province during the post-glacial period about 10,000 years ago. At that time, melt waters allowed a northern expansion through now-impassable barriers. Habitat and weather sorted out the distribution of these cousins. The smallmouth is a northerner equated with cool, deep, rocky lakes of the Precambrian Shield. The largemouth is a southerner that thrives in warm, clear, shallow, vegetation-rich waters south of the shield. In pioneer days, the largemouth was restricted to shallow bays of the lower Great Lakes and did especially well in the shallow Kawartha and Rideau Lake systems of central and eastern Ontario. The smallmouth was found in the Great Lakes and cooler northern waters, including the drainage basins of the St. Lawrence River and Lake Huron. Only a few small populations were found in and near Lake Superior. Largemouth are still scarce above a line from Sault Ste. Marie, Sudbury, and North Bay, but both species inhabit waters in the Rainy River-Lake of the Woods area.

The Rainy River basin was planted with "railroad" smallmouth as early as 1903, according to the ODGF's annual report of that year. The species was non-native to that portion of the province. Largemouth might have

been stocked accidentally along with smallmouth species were cultured in hatchery ponds in southern Ontario and often were transported together in rail.

In early days, ice was used to cool and increase holding capacity during transport. Arranging ice on route and for assistance in planting fish in the countryside remote from the railway was difficult. It was easier to stop at a trestle over creeks and rivers to plant fish directly from the railway car. Planting elsewhere employed trucks, cars, horse-drawn wagons, and backpacks.

The shotgun approach to bass introductions had some successes, but it also spoiled many speckled trout waters and produced large numbers of stunted bass in others. The government planted bass over established

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populations into the 1950s, but research indicated this was wasteful and unnecessary, so it was stopped.

Annual temperatures ultimately dictate the northern distribution of bass in Ontario. Research on smallmouth showed that 50° F (10° C) is a critical temperature above which they feed and grow. A season's growth is directly related to the number of days above 50° F or more of summer water temperatures. Bass starve in winter, and if young lose 63 per cent of their weight they die. If young smallmouth go into winter at less than 2 inches (5 cm) in length, most will not see spring. Though not researched thoroughly, largemouth have even higher preferred water temperatures.

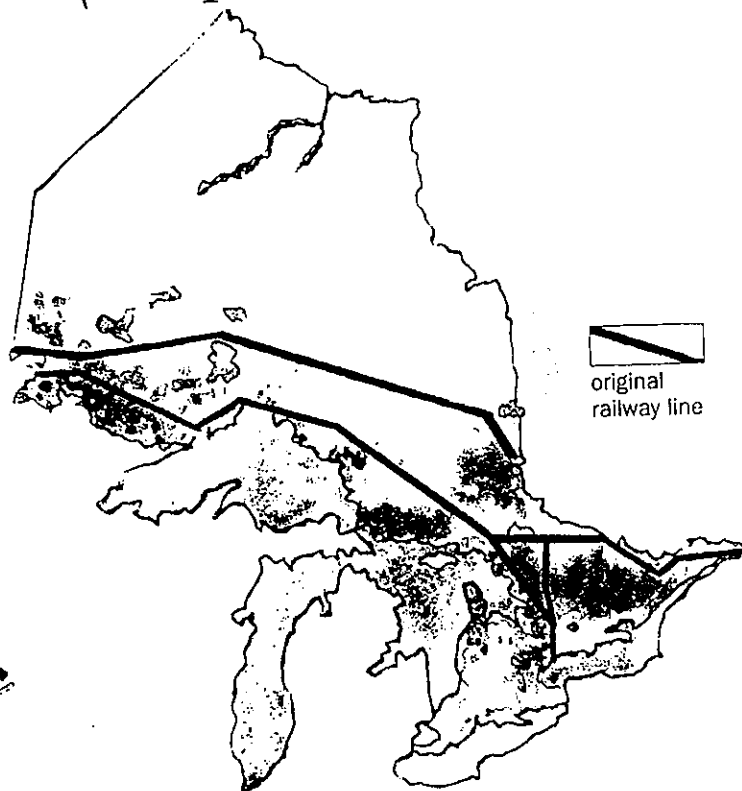
Current Ministry of Natural Resources records show 2,421 smallmouth and 1,275 largemouth waters in Ontario.

The numbers of both species fluctuate due to strong and weak year-classes caused by good or poor spawning and rearing-water temperatures. Hot summers are good for Ontario bass and future fishing prospects.

The smallmouth bass (*Micropterus dolomieu*)

Smallmouth spawn at depths of 2 to 20 feet (.6 to 6.1 m) over clean, wave-washed gravel, pebble, cobble, or sand, in late June to July when water temperatures are 58° to 68° F (14.4° to 20° C). Males build nests and swim-up fry. Smallmouth live a maximum of about 15 years. They grow slowly, reaching 12 inches (30.5 cm) by 6 years of age. They spawn first at age 6 to 7, later in the north. The average angled smallmouth is 1 to 3 pounds (.45 to 1.36 kg). Any fish over 4 pounds (1.8 kg) is trophy. The Ontario record is 9.84 pounds (4.5 kg) caught on Sept. 26, 1954, from Birchbark Lake, near Kinmount. The world record is 10 pounds (4.5 kg), 14 ounces (4.9 kg) from Tennessee.

Ontario records from Ontario Federation of Anglers and Hunters' Big Fish Registry. World records are from the International Game Fish Association.

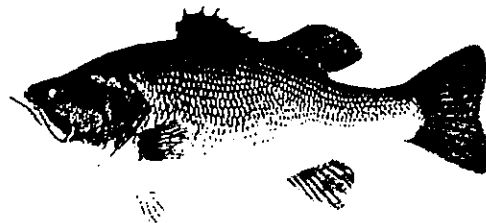
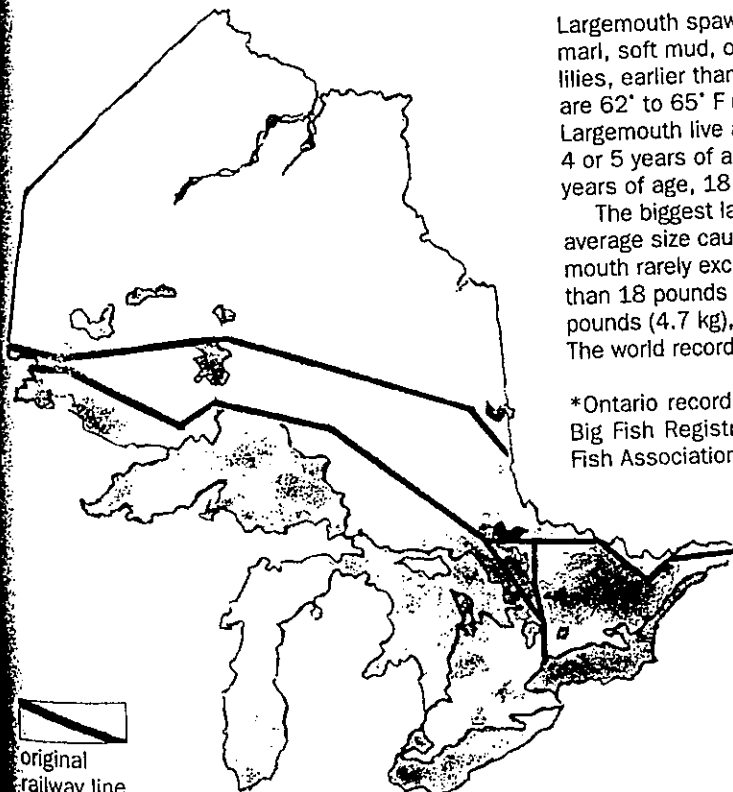


The largemouth bass (*Micropterus salmoides*)

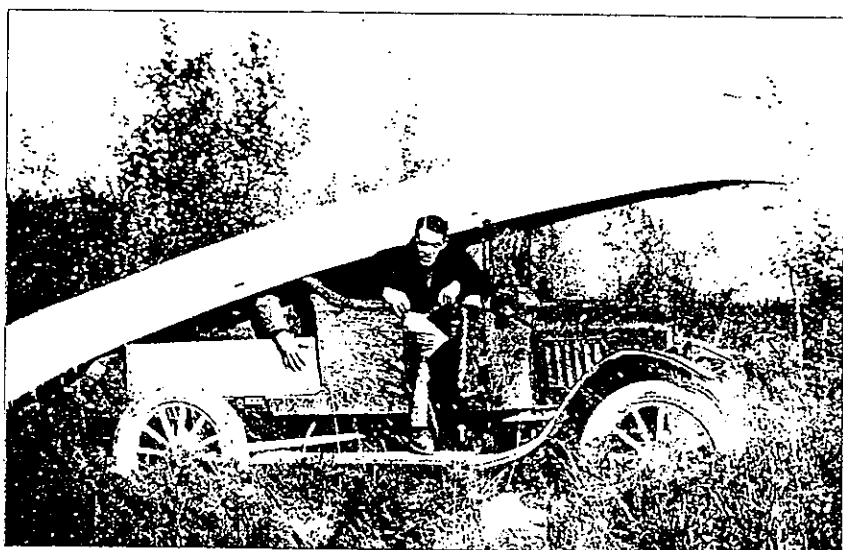
Largemouth spawn at depths of 1 to 4 feet (.3 to 1.2 m) over marl, soft mud, or organic matter, in reeds, bulrushes, or water lilies, earlier than smallmouth, usually when water temperatures are 62° to 65° F (16.7° to 18.3° C). Males also guard eggs and fry. Largemouth live a maximum of about 16 years. Females spawn at 4 or 5 years of age. Largemouth reach 15 inches (38 cm) by 6 years of age, 18 inches (45.7 cm) by 9 years.

The biggest largemouth come from warmer southern waters. The average size caught is usually larger than for smallmouth. Largemouth rarely exceed 9 pounds (4 kg) in Ontario, but grow to more than 18 pounds (8 kg) in Florida. The Ontario record is 10.43 pounds (4.7 kg), caught in 1976 from Preston Lake near Stouffville. The world record is 22.25 pounds (10.09 kg) taken in Georgia.

*Ontario records from Ontario Federation of Anglers and Hunters' Big Fish Registry. World records are from the International Game Fish Association.



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Top, the Department of Game and Fisheries rail car transported bass across the province. Above and left, from the rail line, bass were taken to lakes by trucks, horse-drawn wagons, or specially designed carrying packs.

