

## First customer for satellite service

The Bank of Montreal has signed an agreement with Teleglobe Canada to become the telecommunications carrier's first customer for its international private satellite business service.

A 4.5-metre dish antenna will be installed on the 72-storey First Canadian Place building in Toronto, sending and receiving signals to an Intelsat V satellite 36 000 kilometres above the earth in a geo-stationary orbit.

It will be linked with a 3.7-metre antenna in the London suburb of Ealing, allowing transmission of voice, facsimile, electronic mail and enhanced audio-graphic teleconferencing across the Atlantic Ocean.

The service will begin operation January 1, 1984. Teleglobe, working with British Telecom International, is the first telecommunications company to offer private, digital satellite communications between Europe and North America.

The satellite service will save the bank between 20 and 40 per cent over conventional cable or analogue satellite transmission, said Atherton Wallace, marketing vice-president of Teleglobe Canada. Digital communications offer more flexibility and higher quality transmission.

The bank also plans to use the service for electronic funds transfer, cash management operations, video conferencing and transmission of securities, foreign exchange, money market and management information.

## Insecticide produced from plants

A substance extracted from many common plants is proving to kill mosquito larvae more effectively than the banned pesticide DDT, say two University of Ottawa biologists.

John Arnason and Bernard Philogene have been researching a Canadian discovery that thousands of plant compounds can destroy insects by burning holes in them. According to Mr. Arnason, preliminary results show one of these compounds, when hit by light, is lethal to mosquito larvae but does not appear harmful to humans or other animals.

### Built-in protection

The group of substances, called polyacetylenes, occurs in a wide range of common plants, including sunflowers, white daisies and marigolds. The compounds, discovered by University of British Columbia botanist G.H.N. Towers in 1976, give the plant a built-in protection against insect predators.

About 1 500 plant compounds are known to contain this natural pesticide but Mr. Philogene said that is just a tiny percentage of the plants they believe could contain the toxins.

So far, the researchers have only touched the surface by testing five or six of the most potent ones. One of these has been found to be more toxic to mosquito larvae than DDT, Mr. Philogene said.

But unlike DDT, which was ultimately banned in North America and much of the world because it is so long-lasting, these compounds break down quickly in the environment.

## Nineteenth-century social reformers featured on new stamps

Two new 32-cent stamps were issued September 16 to honour two nineteenth-century Canadian social reformers, an American-born Methodist Episcopal Church preacher and a French-Canadian priest. One of the stamps, designed by Toronto artist Tony Kew, bears a portrait of Josiah Henson, born a slave in 1789 near Port Tobacco, Maryland, against a symbolic drawing of the underground railroad that brought him and other American slaves to freedom in Canada.

As a young boy, Josiah Henson saw his father being sold and taken away from his family. A short time later, he himself was sold and separated from his mother. He later became a fervent Christian and was ordained a Methodist Episcopal Church preacher. By then he had a family of his own and supervised operations on his master's plantation.

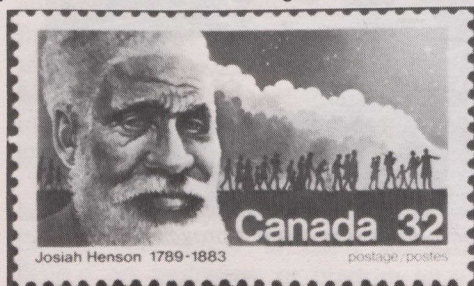
Fearing he might be sold and separated from his wife and children, Henson decided to escape, arriving in Canada with his family in 1830. He took up the cause of other escaped slaves, founding a settlement and establishing a school for them near present-day Dresden, Ontario.

Author Harriet Beecher Stowe used Henson as the model for Uncle Tom in her famed novel, *Uncle Tom's Cabin*. Henson died in 1883 and was buried near his house in Dresden.

The other stamp, designed by Quebec illustrator Jacques Hamel, features a portrait of Curé François-Xavier Antoine Labelle who worked relentlessly in the mid- and late-nineteenth century to improve the religious and economic climates in Lower Canada.

Born in 1833 in Sainte-Rose, a small farming community north of Montreal, he was named parish priest in 1868 in Saint-Jérôme in the Laurentian foothills. Convinced closer ties with Montreal would bring prosperity to his region, Curé Labelle negotiated with government and railway officials to initiate rail service between Montreal and Saint-Jérôme. His relentless efforts resulted in the establishment of train service in 1876.

Three years later he founded the Société de la Colonisation and encouraged Lower Canada colonists to settle in Manitoba. Named Missionnaire in 1889, he became known as the "Roi du nord" (king of the north country). He died at age 58 following surgery.



## Scientists discover new species

Eight new species of living things have been discovered near an underwater volcano a mile below the surface of the Pacific Ocean. They include snail-like and huge worm-like creatures, reports University of Victoria ecologist Verena Tunnicliffe.

Four Canadian and two US scientists made eight dives early last month in the Canadian research mini-submarine *Pisces IV* to explore the volcano 480 kilometres off the coast of Washington.

Ms. Tunnicliffe said the creatures have "a completely new kind of energy" that does not depend on light and a fantastic blood system to be able to get rid of poison.