

Lotek Wireless is a world leader in the design and manufacture of fish and wildlife monitoring systems. Our innovative and internationally recognized **radio**, **acoustic**, **archival** and **satellite** monitoring solutions allow researchers to track creatures of almost any size, in almost any environment. Whether an animal moves through a **terrestrial**, **aquatic**, **marine** or **avian** habitat, Lotek has a system to track it.

Leading researchers around the world rely on Lotek equipment and expertise. We are proud to be partners in fish and wildlife research being conducted in more than 35 countries.

Our craft is technology; our passion is the environment. We are committed to providing innovative solutions for a sustainable future. In addition to our leading edge equipment, we also provide environmental consulting services, to assist clients with system selection, research design and implementation, equipment training and data analysis.

## Our Products

Simply stated, Lotek makes the most advanced and reliable fish and wildlife monitoring equipment available today. From the traditional to the groundbreaking, we offer researchers a wide range of tracking solutions.

Our systems employ the following technologies:

### Radio and Acoustic

Telemetry is the process of conveying information from one location to another. Our telemetry systems include a wide choice of *transmitters* (devices that emit unique radio and/or acoustic signals identifying the animals that carry them) and *receivers/dataloggers* (instruments that detect the transmitters' signals and collect and analyze the data received from them). We have taken these technologies in exciting new directions, including:

- combined radio & acoustic tags for mixed habitats (e.g., freshwater/marine or shallow/deep)
- unique coded transmitters that allow large numbers of animals to be tracked on a single frequency
- digital spectrum processor (DSP) technology that allows simultaneous monitoring of multiple frequencies
- remote, off-site monitoring and retrieval of data

### Satellite

Our satellite tracking systems use the Global Positioning System (GPS) to record accurate data on the whereabouts of large and small animals in terrestrial and marine habitats. The animal collars are compact, sophisticated devices equipped with radio modems and computer memory modules for data storage and remote transfer of data.

### Archival

In fresh or salt water studies where the tracking of species using traditional radio or acoustic methods is not possible, archival (data recording/storage) tags can be used to take light, temperature and depth measurements at regular intervals and store the data until the fish is recaptured. The data can then be used to provide geolocation information. Lotek's archival tag line includes:

- the world's smallest commercially available geolocation archival tag
- deep water tags rated to a depth of 2000 meters
- tags capable of storing more than 6 million data samples for up to 25 years

## Locations

Lotek's operations are carried out at two main plants: one in Newmarket, Ontario and the other in St. John's, Newfoundland.

## Service

As Lotek's applications arm, Applied Biometrics Inc. (ABI) offers a combination of technological and biological expertise to any consultant or researcher interested in biotelemetry research. ABI's biologists and engineers combine years of experience in fish and wildlife tracking with hands-on expertise in the optimal use of all types of telemetry equipment. Regarded as the "consultants' consultant" in the field of biotelemetry, ABI has assisted in the design and implementation of many important research projects.

## Partners

As a strong supporter of the scientific research that biotelemetry serves, Lotek is pleased to be a partner in key strategic alliances with:

Northwest Marine Technology (NMT)

NMT of Shaw Island, USA, has long been recognized for its technological innovation in the science of fish marking. Lotek recently acquired NMT's unique geolocation technology, adding their memory tag to our own growing line of archival products.

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*Lotek Wireless Inc. was awarded the 2002 Canada Export Award for Innovation and Technology Achievement by the Department of Foreign Affairs and International Trade (DFAIC). International Trade Minister Pierre S. Pettigrew (left) and RBC Global Services Vice President Duarte Miranda (right) presented the prestigious award to Lotek's President and CEO, Jim Lotimer (centre), at the Annual Convention of the Canadian Manufacturers and Exporters in Vancouver on October 7, 2002.*