

CASE STUDY

Coles Mussel Farms

“MAPINFO PROFESSIONAL IS EASY-TO-USE, HELPING US ENSURE WE MEET TRACEABILITY REGULATIONS WHILE INCREASING OPERATIONAL EFFICIENCIES.”

Lea Murphy, Project Manager, Coles Mussel Farm

COLES MUSSEL FARMS
ENHANCES FOOD SECURITY
AND PRODUCTIVITY BY
FULLY TAPPING INTO ITS
LOCATION-BASED DATA.



Challenge

Coles Mussel Farms wanted a system to track shellfish stock throughout the entire supply chain, enabling it to monitor treatments and trace the origin of shellfish it harvested and sold. It also needed a system to meet traceability regulations set by the Canadian government.

Solution

Coles Mussel Farms uses GPS, wireless and mobile technologies, uploading data on mobile devices and sending it to a central database. Information about shellfish stocks, including treatments and locations, is visually displayed with MapInfo Professional, Pitney Bowes Business Insight's flagship application for business and mapping analysis.

SUMMARY

Overview

Like many other sectors of the food industry, the shellfish sector is facing increased scrutiny around traceability and new and growing regulations dictating that they track shellfish throughout their entire lifecycles—from harvest to the plate. Coles Mussel Farms needed a system to maintain a record of its shellfish production, including treatments on its off-bottom shellfish leases, in a format that could be recovered quickly and cost effectively.

David Coles, owner of Coles Mussel Farms, has been involved in the mussel industry for more than 30 years and is committed to food safety and security. His company is located in Prince Edward Island and is one of the top five mussel producers in Atlantic Canada. Coles employs more than 20 people year round and 60 plus seasonally.

The initial goal was to create a tracking and management system using Radio Frequency Identification (RFID), a popular technology for tracking a variety of goods. Coles investigated RFID to track all activities, including seed collection, rearing, and harvesting. However, Coles learned that RFID tags did not provide the functionality needed during winter months, when water temperatures plummet.

Instead of RFID, Coles assembled a mixture of technologies including GPS and mobile devices. Crew chiefs on the boats use HTC Touch Diamond Cellular phones to upload information that is wirelessly sent to a centralized database. The HTC device and GPS technology in the unit allow the operators to identify the crew's position within two meters.

Gaining a Real-Time Snapshot of Mussel Operations

Crew chiefs collect a wealth of information on the shellfish and their operations including time, date, location of treatment and other activities associated with the culture of Blue Mussels. Once the information is in a central location, employees can visualize the data with MapInfo Professional and create graphics and maps displaying crews' operations such as lime treatments, restocking, and harvesting.

“MapInfo Professional enables us to create maps and other graphics illustrating all activities connected to our shellfish stocks on the farm,” said Lea Murphy, project manager. “MapInfo Professional is easy to use and provides us with another dimension of information, helping ensure we meet regulations while increasing efficiency.”

“MAPINFO PROFESSIONAL ENABLES US TO CREATE MULTI-LAYERED THEMATIC MAPS AND QUERIES, ENHANCING THE VALUE OF THE OVERALL SYSTEM.”

Lea Murphy, Project Manager, Coles Mussel Farm

RESULT

Since crew chiefs submit data as they perform each activity, Coles can gauge how long it takes to complete each task. Management can also record all activities on each mussel lease, including who is responsible for the work done.

“This system is a significant step towards streamlining the collection and management of shellfish culture operations at the farm level,” Murphy said. “MapInfo Professional enables us to create multi-layered thematic maps and queries, enhancing the value of the overall system.”

As a result, Coles will be able to trace the origin of all its shellfish from the source of the mussel seed to point of sale in just a few key strokes. Should issues arise in the future, Coles will be able to trace it to the point of origin, quickly addressing the problem.

“The Prince Edward Island shellfish industry is very aware and concerned with food safety and security,” Murphy said. “The industry has been affected by harmful algae blooms in the past. As result, shellfish farmers understand the importance of being able to track and trace shellfish throughout their life cycles.

Coles also anticipates that the project will result in time and labor savings. It is estimated that the new management system will increase productivity on the farm by about 15 percent through greater operational efficiency and consistency at the farm level.

Murphy concludes, “Other sectors of the shellfish industry including oysters, quahogs and clams as well as the commercial lobster fishing industry can benefit from the monitoring technology employed by Coles. Consumers will also have greater peace of mind, knowing that any food safety issues can be quickly addressed.”

CANADA

26 Wellington Street East
Suite 500

Toronto, ON M5E 1S2

1.800.268.3282

pbbi.canada.sales@pb.com
www.pbinsight.ca

UNITED STATES

One Global View
Troy, NY 12180

1.800.327.8627

pbbi.sales@pb.com
www.pbinsight.com

EUROPE/UNITED KINGDOM

Minton Place
Victoria Street
Windsor, Berkshire SL4 1EG

+44.800.840.0001

pbbi.europe@pb.com
www.pbinsight.co.uk

ASIA PACIFIC/AUSTRALIA

Level 7, 1 Elizabeth Plaza
North Sydney NSW 2060

+61.2.9437.6255

pbbi.australia@pb.com
pbbi.singapore@pb.com
pbbi.china@pb.com
www.pbinsight.com.au

THE PITNEY BOWES BUSINESS INSIGHT ADVANTAGE

MapInfo Professional is a critical component of Coles Mussel Farms management initiative. With MapInfo Professional, a leading desktop location intelligence analysis solution, Coles is able to visualize and analyze location-based data in maps and other graphics, gaining deeper insights into its overall operations.



Every connection is a new opportunity™