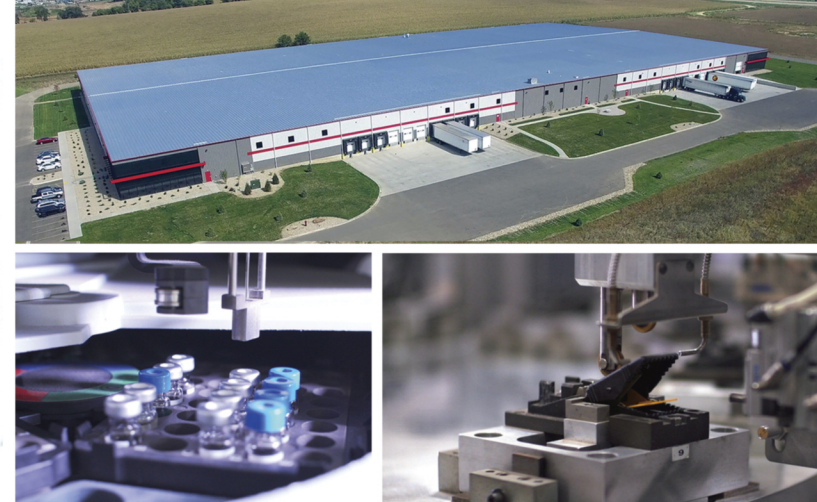
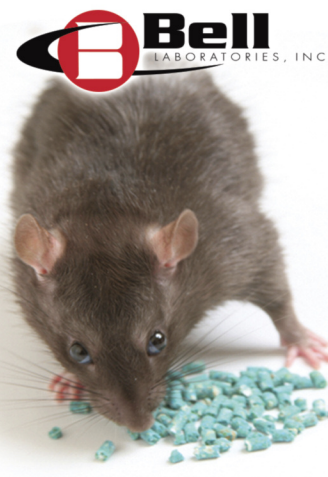




This year, Bell Laboratories will be celebrating its 45th year in business. In the coming Bell Report issues, we will be looking back at our history and growth along the way.

**SPOTLIGHT ON:
CONSTRUCTION**

The biggest change at Bell since we looked back over the past five years has been the construction of the new warehouse and manufacturing facilities on Stack Drive. This expansion of our manufacturing, storage and shipping areas ensure we get the best products out to our customers on time, every time.



THE BELL REPORT

North American Edition

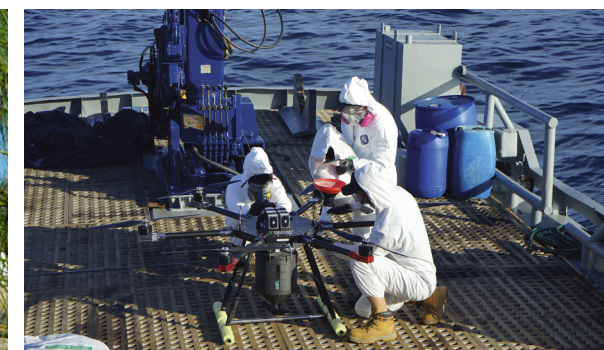
VOLUME 38 | NUMBER 1 | JANUARY - MARCH 2019



3699 KINSMAN BLVD. | MADISON, WI 53704
www.belllabs.com

Address Service Requested

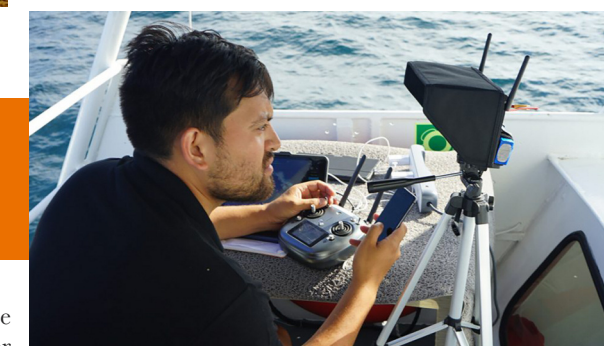
PRSRT STD
US Postage
PAID
Madison, WI
Permit 1355



Left: Drone hovers just off the ground on North Seymour Island. Above: Technicians filling up drone's bait hopper.

The Latest Technology in the War Against Rodents:

DRONES



Above: Technician remote monitoring the drone.

Choose Your Disguise



When baiting at sensitive accounts we have you covered with different disguise options, no matter the setting. In outdoor and natural environments, choose Protecta® EVO® Landscape® or Protecta® EVO® Weighted Landscape®. In the heart of the city, the Protecta® EVO® Circuit® secures vertically to walls, blending into its surroundings.

We Have You Covered.

We have seen how much damage rats can do to our homes, buildings, and businesses, but that pales in comparison to the amount of damage rats can do to an ecosystem. Rats were introduced to the Galapagos Islands in the 16th or 17th century by whalers and pirates. In 2012, Bell worked with Island Conservation on a baiting project for the island of Pinzón, and the island was eventually declared rat free at the end of 2014. North Seymour Island is now another area where rats have flourished due to a lack of natural predators around to combat their population. Located off the coast of Ecuador and part of the Galapagos chain, North Seymour Island is the nesting site for rare seabirds, such as frigate birds and swallow-tailed gulls, whose eggs and hatchlings make easy meals for rats. Islands

like North Seymour have extremely delicate ecosystems—fish, insects, cacti, and other plants serve as food for seabirds, and nitrogen-rich bird droppings serve as a vital nutrient for coral reefs. Introducing even one predatory mammal, especially one as successful as rats, to an island like North Seymour, can decrease the bird population and devastate the entire ecosystem.

In 2007, conservationists succeeded in ridding North Seymour Island of rats, but monitoring activities in 2018 determined that the island was infested by black and brown rats, once again. When rats re-infested North Seymour Island, a state of emergency was declared, and Island Conservation and their affiliates once again stepped in to declare war on the rats, this time using drones.



Above: Drone takes off from a ship off the coast of North Seymour Island.

Continued on page 2



Workers on foot dispensing bait among the rocks of North Seymour Island



Above: Bait scattered on the rocky landscape of the Galapagos islands. Below: Norway rat finishing up a meal on North Seymour Island



In preparation for the eradication, large bait dispensers were 3-D printed to be compatible with the drones, and Bell produced and shipped over 6,600lbs (3,000kg) of rodenticide. When producing bait that is going to be used specifically for island conservation, Bell has formulas to accommodate any baiting environment. Bell typically uses wet formula or dry formula for conservation projects. Dry formula is a pellet shaped bait that works for dry environments—these pellets break down quickly (2-3 weeks), before non-targets have a chance to eat them. Wet formula is a pellet shaped bait



that works in wet environments and lasts a few weeks.

Typically in island conservation projects, bait is spread by hand, or through the use of helicopters. While helicoptering in bait is impressive and sometimes the only option, helicopters can also be difficult to work with; they need specialized pilots and bait spray buckets. In addition to this, they often need to be shipped to the location and the entire process can get expensive quickly. Drones are far less expensive, and they have the ability to fly autonomously, along predetermined flight patterns, while dispensing bait with extreme precision. Precise bait dispersion is a key reason why drones could be the weapon of choice in future island conservation projects. Placing bait into extremely precise locations reduces waste and limits exposure to non-toxic animals such as birds and reptiles. While the baits were formulated specifically to not appeal to birds or reptiles, every precaution is taken to assure safe bait application. Three drones were used for the eradication project on North Seymour Island—each drone took several 15 minute trips, dropping 44lbs (20kg) of rodenticide on each trip. After 52% of the island was baited with drones, it took more than 30 park rangers to spread bait to the rest of the island, by hand.

Monitoring activities will take place on the island for the next two years, which is the length of time needed to determine whether or not the island can be declared rodent-free. The island conservation project on North Seymour Island is the world's first use of drones to remove invasive vertebrates, but drones are now looking to be the go-to solution for bait dispersion on remote islands. ■



Above: Hatchling takes shelter under a rock. Below: North Seymour islands Blue-footed Booby bird perched on a rock. Left: Frigate bird nesting on the ground.



All photos credited to: Island Conservation

SAVE TIME AT YOUR ACCOUNTS WITH PRE-WEIGHTED STATIONS



Pre-weighted stations offer a ready-made solution for securing bait stations, all while maintaining a professional appearance. This eliminates the need to purchase various tools and anchors to secure traditional, unweighted stations, saving PMPs time and money.



Protecta EVO AMBUSH

PROTECTA LOAD-N-LOCK™



Protecta EVO EXPRESS

PROTECTA SIDEKICK®



VOLES VS. MOLES

Voles and moles are often mistaken for one another. Both moles and voles spend most of their lives underground and destroy landscapes and yards. While the two animals certainly have similarities, they each have many distinct behavioral and biological characteristics:

VOLES

- Have sharp incisor teeth, blunt nose, sturdy round bodies, short tails, thick fur, small eyes, and small ears
- Construct well-defined surface runways
- Primarily stay in burrow and will sometimes travel into a garage or basement
- During cold and snowy winters, will eat away at tree trunks and grass roots, often damaging shrubbery and yards severely

MOLES

- Have tiny eyes, long nose, large shovel like feet with large claws, and thick fur
- Create visible tunnels and cone/volcano shaped mounds that damage landscapes
- Very rarely leave underground tunnels
- Eat worms and grubs

