Dear Customers and Friends,

Please join us as we celebrate our 20th anniversary and look back at 20 years during which we have journeyed together through good and bad times, through amazing discoveries and economic recessions. It has been a privilege to serve you; your support and encouragement have urged us on. For this we are truly grateful.

This journey would not have been possible without our colleagues at CLS; our shared vision of providing a high tech platform for animal tracking has created strong cooperative efforts over the years. We thank Michel Guigue of CLS France and Bill Woodward of CLS America for their good wishes and kind words.

We also thank Geoff Holroyd and Helen Trefry for an update of their Burrowing Owl’s northward migration. The Burrowing Owl was voted “Cutest Bird” in our lighthearted MTI Book of Records in this issue. We hope you enjoy looking back at some of the most memorable species tracked using our transmitters.

We hope you also enjoy a walk down memory lane. As we put this issue together we realized how far we have come. Our vision has always been to advance the field of satellite telemetry. So, it is very satisfying to look back at so many pioneering milestones, a series of “firsts” in our industry.

However, along with success comes a responsibility to give back. We hope to receive many applications for our end-of-year party drawing for free transmitters and for those we plan to donate to cool projects. We also hope to receive many applications for the student scholarships we will provide at our conference in March of 2012. Save the date and please plan to attend. Come celebrate past successes with us and look to the future.

We thank you for being part of our journey the last 20 years and look forward to many more years together.

Have a safe and productive field season.

Sincerely,

Paul and the staff at MTI
Celebrating Our History: The First 20 Years

Machines

Cutest Marine Creature

Machinery

Cutest Bird

Our Manuals

Cutest Marine Creature

Price List

Then...

Looking Back: A Collection of Our
FIRSTS

First Archival Pop-up Tag

Longest Tracked Bird

Statistical Surveys

Longest Migration

Most Tracked Bird

Location

Where on Earth

Real Time

The Largest Bird

Our Staff

—it’s a miracle! We recognize all past employees

The MTI family: it truly is a privilege
to work among employees we consider
friends. We enjoy a Maryland Crab Feast,
On May 16th, the actual anniversary
is our birthday! Last year we enjoyed a Maryland Crab Feast,
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Celebrating Our History: The First 20 Years

From Our First Catalog to Our New Website

Now you can review our 2015 anniversary catalog on our website. We think you will find that it is much easier to review and find what you need compared to our old catalog, which was a 48-page book. This new catalog is updated monthly and includes all new products. We think you will find it easier to browse and select what you need.

Price List

The price list is updated monthly on our website. You can now easily compare our products with other companies.

Machinery

Our Machinery section includes all of our machinery and equipment. You can see our machinery in action on our website.

Our Manuals

Our manuals are now available on our website. You can download them and view them online.

Location

You can find our location on our website. We are located at 8835 Columbia Parkway, Suite K & L, Columbia, Maryland 21045.

Celebrating Our History:
 MTI: Pioneering Milestones in the Industry

Mating tag with satellite and modem antennas installed on a turkey test bird with a functional “PTT” under the skin. The antenna, solar, and modem antennas are critical to providing more information than ever before.

Ongoing...

Our ongoing research includes satellite tagging of new species and new tracking technology.

Now!

Our new online price list is now available. Notice we offer a battery powered GPS Doppler PTT!

Microwave Telemetry Book of Records

Over the last 20 years, we have had the pleasure to watch our customers track many unique species, small and large, cute and handsome. This list cannot be complete without including all of the most memorable projects tracked. Of course our list is never complete, but the projects are all given with equal affection.

Cutest Marine Creature

Our most tracked marine creature is a white whale. The 5g solar PTTs are tagged each of the white whales we have tracked. In 2005, we were tracking these whales in the North Atlantic Ocean.

Cutest Bird

The most tracked bird we have tracked is the Peregrine falcon. The Peregrine falcon is the fastest bird in the world and we have tracked them in the United States and Canada.

Rarest Bird

The rarest bird we have tracked is the Peregrine falcon. The Peregrine falcon is the fastest bird in the world and we have tracked them in the United States and Canada.

Most Tracked Bird

The most tracked bird we have tracked is the Peregrine falcon. The Peregrine falcon is the fastest bird in the world and we have tracked them in the United States and Canada.

Longest Tracked

The longest tracked species is the walrus. We tracked this species for over 10 years and the data we collected was invaluable.

Smallest Fish

The smallest fish we have tracked is a black cod. The black cod is the smallest fish in the world and we have tracked them off the coast of Alaska.

Ugliest Fish

The ugliest fish we have tracked is the ocean sunfish. The ocean sunfish is a large fish that looks like a head. Inga Potter tracked this unusual fish off the coast of New Zealand.

Weirdest Fish

The weirdest fish we have tracked is the taillored Godwit. The taillored Godwit is a migratory bird that travels over 29,500 km, from Alaska to New Zealand in 2007.

Scarlet Creature

The scarlet creature we have tracked is the red knot. The red knot is a small bird that can be found in the Arctic. We tracked them in the Arctic and the data we collected was invaluable.

Over the last 20 years, we have had the pleasure to track many unique species, small and large, cute and handsome. This list cannot be complete...
SAVE THE DATE!

MTI 2012 Avian and Marine Tracking Conference

Conference Objective
To promote and facilitate the exchange of information among scientists using satellite telemetry all over the world including updates on the latest developments in satellite telemetry.

Date
Due to scheduling issues at the previously proposed venue, the conference has been rescheduled for March 2012 at a new venue. Conference Sessions will be held March 27, 2012 through March 29, 2012 at the Sheraton Columbia Town Center Hotel in Columbia, Maryland. We have negotiated excellent rates and free wireless Internet.

Details will be posted on our website in September.

Registration Information
An on-line registration form will be posted in September. All conference attendees, including speakers, are required to register. Registration entitles attendees to all sessions, a copy of the conference proceedings and admission to the welcome dinner reception on Tuesday evening. Breakfast and lunch will be hosted each day.

Call for Papers
Look for a call for abstracts on our website in September. Abstracts will be accepted for presentations describing the use of our PTTs in avian and marine tracking. The deadline for submission will be January 15, 2012.

Production slots are assigned on a first come-first served basis. We require a Purchase Order and Production Form to lock in a slot. Spring production slots fill quickly so please send your orders as early as possible!

Please note that starting in 2012, we will schedule refurbishment of transmitters for August through February only. Please plan accordingly!

Be sure to use the latest GPS parsing software! Data from 2011 GPS PTTs must be parsed with this latest version of the parser, so be sure to install and use the software shipped with your PTTs.

MTI will be closed the week of July 18 - 22 for our biennial retreat. We will have limited access to email and voice messages. We will return phone calls and emails on Monday, July 25.

Scholarships
At our 2009 Bird and Fish Tracking Conference, we awarded scholarships to two students: Sarah Trefry from the University of New Brunswick, Canada, and Pascual Lopez from the University of Alicante, Spain. Continuing our practice of promoting satellite telemetry for the next generation of scientists, we will sponsor two students to attend the 2012 conference by providing registration fees, food and lodging. Please see our website for details and applications which will be posted mid-August 2011. Selections will be made by a committee. Students must provide their own transportation.

Bits & Pieces

2009 Conference attendees

2009 scholarship student recipients
Sarah Trefry (University of New Brunswick, Canada) and Pascual Lopez (University of Alicante, Spain).
Free Transmitters for School Projects

You may remember Tannis Thorlakson, who participated in a satellite tracking project with transmitters we donated to Liberty Bell High School in 2002, and who is now a student at Harvard College. Tannis said of her experience, “As I stop to reflect on what initially shaped my interest for environmental work, I immediately jump to my involvement with the Chelan Ridge Raptor Migration Project.”

Similarly, Nomin Erdene, a participant in the Mongolian Great Bustard school project we featured in our winter 2006 newsletter, found her interest piqued by the experience. She is now at the National University of Mongolia studying bioinformatics.

Over the past twenty years it has been our pleasure to work with researchers whose projects involve school children. It is our hope that early exposure to the sciences will spark a lifelong interest. To this end, in celebration of our 20th anniversary we will be donating satellite transmitters for school projects, just as we did for our tenth and fifteenth anniversaries.

If you are involved with your local middle or high school, here is your chance to shape the next generation of biologists with an opportunity for the students to get some hands-on experience with satellite telemetry. Rules and application will be posted on our website in mid-August 2011. The deadline for application is September 30, 2011. The winner will be announced in our winter newsletter.

20th Anniversary Drawing for Free Transmitters

Enter our drawing for a free GPS PTT or a free X-Tag!

Entry Rules

Entries may be mailed or submitted in an email with subject line “Free Transmitters” and your name, address, organization and type of transmitter in the body of the email.

Entries must be postmarked or emailed no later than October 31, 2011

Send entries to:
Microwave Telemetry, Inc.
8835 Columbia 100 Parkway
Suites K & L
Columbia, MD 21045 USA

Or email microwt@aol.com

One entry per customer.
Drawing will be made at our Holiday Party in December.
Winners need not be present.
Winners will be contacted by email.
Winners will assume Argos costs.
All decisions are final.
Employees or family members of our competitors and associates are ineligible for prize.

Rules will also be posted on our website.

Name _____________________________________________
Address ____________________________________________
____________________________________________________
Email ______________________________________________

Choose One:
❏ Free GPS PTT
❏ Free X-Tag

Our Sympathy…

Our hearts ache for the people of Japan in the wake of the devastating earthquake and tsunami which struck there earlier this spring. Likewise we pray for those here in the United States who are dealing with the aftermath of hundreds of tornados. We have made donations to the Red Cross to provide whatever help is needed in Japan and in affected communities here.
In the last issue of MTI Newsletter we told you about the southward migration from Canada of a Burrowing Owl wearing a 5g solar PTT-100. The winter and spring story of this owl is just as revealing with new information about the migration of this iconic prairie owl. To quickly recap, the transmitter was attached to a female owl that nested successfully in southern Alberta, Canada. She flew to Baja Sur, Mexico via New Mexico in November and stayed there for the winter. She delayed her northward departure until early April, a time when burrowing owls have already started to arrive in Canada. By April 11, she was 20 km east of Denver, Colorado, 1400 km straight line distance. We assume she flew about 1700 km. This flight is comparable to the speed and movements of Peregrine Falcons, but totally unexpected by a round-winged small owl. In the next three days she only moved 100 km north. She was 30 km east of Fort Collins and she has stayed there! The Location Class 3 record placed her in the middle of a prairie dog colony.

The ability to study breeding dispersal has important conservation implications. The number of Burrowing Owls declined 20% per year during the 1990s in prairie Canada to the point that they were declared endangered in 1995. The numbers have stayed depressed since. Stable isotope analysis of breeding Burrowing Owls in Canada led to the hypothesis that the decline was caused by high rates of breeding and natal dispersal that resulted in a net emigration of owls from Canada to the US and Mexico. Satellite transmitters provide a new technique to study these dispersal movements, which may occur at a scale almost impossible to study with traditional techniques such as banding and VHF telemetry. Even though this owl was a successful breeder in 2010 in Alberta, she has stopped short in Colorado and is apparently nesting in one of the core breeding areas for Burrowing Owls remaining in North America.

5g PTT Demonstrates Dispersal Hypothesis in Burrowing Owls

By Geoff Holroyd and Helen Trefry - Environment Canada, Edmonton, Alberta, Canada geoffrey.holroyd@ec.gc.ca, helen.trefry@ec.gc.ca

Microwave Telemetry: The Game Changer

Bill Woodward, CLS America and Michel Guigue, CLS France

In the late 1970s the Argos Data Collection and Location System was conceived by engineers at the French Space Agency after their successful operation of a similar experimental data relay satellite for acquiring and relaying telemetered data from meteorological balloons. Dedicated to the environment and begun as a cooperative program between the U.S. and France the Argos success story has spanned three decades and continues to support the evolving capabilities of the biological community for tracking animals in their natural habitat. The longstanding partnership between Microwave Telemetry and Argos has provided the valuable framework within which the Howes’ visionary and innovative efforts have had an enormously positive impact on the wildlife community and on the ability to successfully apply Argos to their scientific needs. Starting in 1991 with a “small” 95 gram transmitter, Microwave Telemetry has continually pushed the envelope of miniaturized electronics enabling the community to continue to rewrite their textbooks on the migration patterns and habits of an increasingly wide variety of avian, marine, and land animal species. The recent certification by CLS of their 5 gram PTT100-5 is the culmination of years of hard work and dedication to the wildlife community. The PTT100-5 dramatically expands the number of bird species that can be tracked and changes the game significantly regarding animal tracking capabilities. What a ride the last two decades has been…. congratulations to Paul, Chris and the whole team on Microwave Telemetry’s 20th birthday.