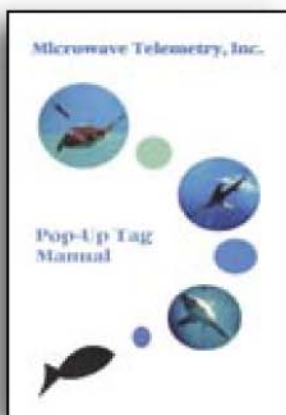


## Updated Manuals Available to Customers

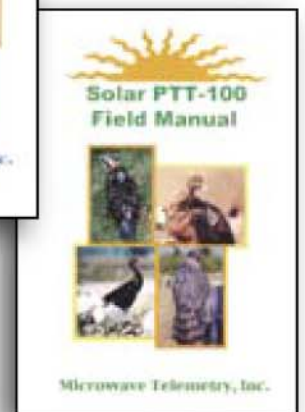
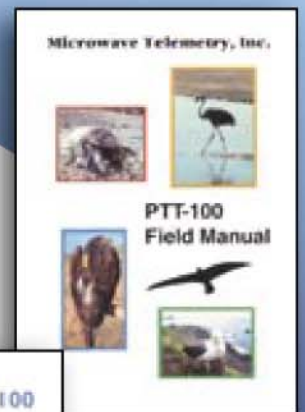
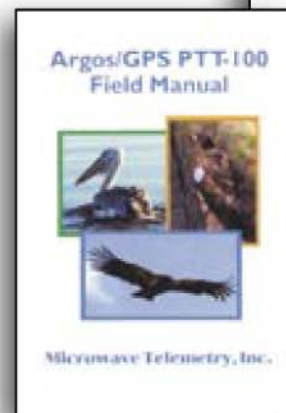
For the last few months, we have been including our new instruction manuals when shipping your PTTs. However, updated manuals are available to all customers. If you would like a copy, please e-mail us ([microwt@aol.com](mailto:microwt@aol.com)) with your address so that we can either mail you a copy or e-mail you an Acrobat pdf version.

*Please Remember...*

- Read the manual carefully before deployment of your PTT
- Test your PTT before deployment. Failure to follow our test instructions will render your PTT's warranty null and void.
- Call us if you need help figuring out your test data



Call immediately if you stop receiving data from your PTT. Only the prior 10 calendar days of data can be accessed by logging into the Argos System. Older data would have to be requested from the archive at CLS Argos for a fee. Promptly getting in touch with us enables us to investigate and recommend the correct action to be taken.



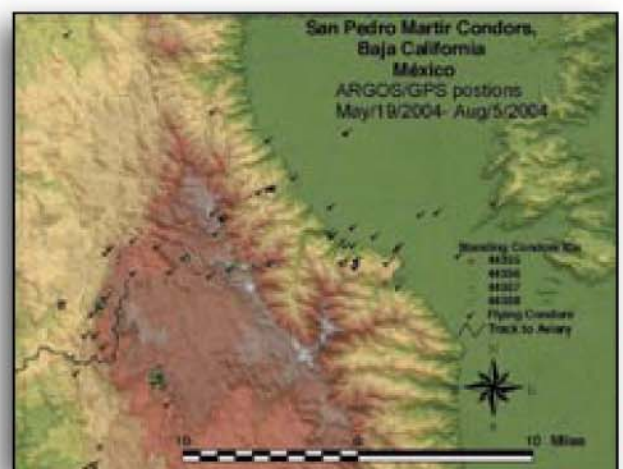
## Tracking Condors

*Continued from page 6*

tested on California condors released in the Grand Canyon by Chris Parish of the Peregrine Fund in 2003 and now several are in use throughout California and Baja.

Not only do we get meter accurate positions several times a day, but the newest parsing software provided by Microwave Telemetry makes transferring the coordinates sent by Argos relatively simple to import into Arcview projects and on to GIS based maps.

A transmitter speed of "0" tells us that the bird is perched while a speed of 20 – 30km/hr indicates that the bird may be in a thermal. Speeds of 50 – 80km/hr often indicate flights between thermals. A series of time/position points gives us a picture of their speed, altitude and direction of movements. Depending on the time of day, a cluster of points may indicate the use of an overnight roost or a feeding opportunity. Since there is a significant risk of lead poisoning when condors feed on "natural" carcasses that have been wounded or killed by hunting it is important for us to document the types of food they find on their own. When we observe birds returning to the central roosts after a few days' flight with full crops of food we now can plug into our hand held GPS the coordinates of a bird's previous days activity and push "GO TO" for a trail directly to the presumed feeding site.



*Meter accurate location points on a GIS based map allow us to manage the release program at a new level.*

Under exceptional flying conditions some exploratory flights of our released condors can be more than 300 miles over a day or two making it impossible to track their movements using conventional radio transmitters. Although still costly, the new GPS PTTs are making it possible to track their activities in ways that could not otherwise be possible using conventional methods, a much needed development in the program that will be significant in helping us reach our recovery goal for the species.

Mike Wallace, Ph.D.  
California Condor Recovery Team Leader

*For further information on condor recovery and links to other program participants visit [www.sandiegozoo.org](http://www.sandiegozoo.org) CRES/Condor program.*

Photo courtesy of Alejandro Inohosa