

tags@wildlifeComputers.com WildlifeComputers.com +1 (425) 881-3048

8310 154th Ave NE, Suite 150 Redmond, WA, 98052 USA

# **PRE-DEPLOYMENT CHECKLIST**

Before you deploy your tags, there are a few important steps we recommend you complete. Completion of these steps will help ensure you get the correct data.

#### **Before The Tags Arrive**

- If required, talk with your Technical Sales Consultant about custom tag configuration—your tags are set up with a default configuration for your taxa unless you specify otherwise.
- Create/sign-up for a free Wildlife Computers Data Portal account.

#### **Before Deployment**

Download Software

Link Your Argos Account

Optimize Your Setup

Antifoul Your Tags (When Applicable)

Initialize Your SPOT or SPLASH Tags

#### **Download the Correct Software**

It is important to know your tag type. This determines which software to download in order to communicate with your tags.

- To communicate with all tags, you will need to use the USB Communications cable. Download the USB Communications Driver: <u>https://bit.ly/64bitinstaller</u>
- Download the correct software and user guide for your tag type: <u>https://wildlifecomputers.com/</u> <u>support/downloads/</u>
  - To find your tag type, look on the invoice. If your invoice is unavailable, contact your technical sales consultant.

# **PRE-DEPLOYMENT CHECKLIST – continued**

### **Link Your Argos Account**

We recommend linking your Argos account with your Wildlife Computers Data Portal account. This will allow automatic download of all your Argos data into the portal for easy access and management.

- 1. Log in to the Wildlife Computers Data Portal. In the grey header, select My Data. Click on the button "Link Argos Account."
- 2. Click on "Add Account."
- 3. Enter your Argos username and password.
- 4. Click on "Add."

#### **Optimize Your Setup**

Wildlife Computers usually ships tags with a pre-configured deployment setup. However, you can optimize the setup for your specific application. If you expect your animal to move less than 500 km from the deployment location, you can use the <u>Wildlife Computers Argos Pass Analysis</u> (http://bit.ly/ argospassprediction) app. This program will:

- 1. Determine the best and worst hours of satellite coverage for your location and date range. You can then program transmissions to occur only when satellites are overhead.
- 2. Inform you how increasing the number of re-transmissions affects the probability of successful data transmission. If data products are enabled for transmission, the Wildlife Computers default will attempt to transmit EACH data message 10 times. Depending on where in the world the tag is located, data messages may need to be retransmitted more than 10 times to increase the probability of transmission reception by the Argos satellites. *Note: increasing the number of data transmissions will reduce tag life.*

You can learn more here: https://bit.ly/utilizingargospasspredictionsoftware

# Antifouling

Consider applying antifouling to your tags before deployment—especially on sea turtles and sharks. The effects of tropical waters, minimal surface time, and shallow habitat (not deep enough to kill off epibionts) make sea turtle and shark deployments highly prone to biofouling. Excess marine growth around tag sensors and antennas can cause a tag to stop transmitting after only a few weeks. For more information, refer to our antifouling reference sheets:

<u>Micron Application Protocol</u> - https://bit.ly/micronapplication <u>How to Apply Antifouling to a Pop-up Tag</u> - https://bit.ly/antifoulpopup

# **PRE-DEPLOYMENT CHECKLIST** – continued

# **Initializing Your SPOT or SPLASH Tags**



Note: Do not initialize pop-up tags.

# Why is the initialization process important?

We highly recommend tag initialization prior to deployment for our SPOT and SPLASH tags to help ensure locations are received as quickly as possible after deployment, regardless of animal behavior. Tag initialization allows Argos to determine a quality location prior to the tagged animal being released. This is significant because the Kalman filtering algorithm uses measurements from both the current satellite pass and from previous satellite passes (such as during testing at Wildlife Computers) to calculate positions and requires an initial quality location. A quality location is achieved when four or more messages are successfully received by Argos during a single satellite pass.

If a good quality "seed" location is not achieved prior to deployment, then it must be obtained while on the animal. This can be problematic, as it can take several days, even weeks, for surfacing behavior to allow for a quality location hit while deployed. After a good quality seed location is achieved, location estimates are possible from only one or two messages per pass. **A seed location must be obtained within four days of deployment.** 

Tag initialization allows you to provide that necessary high-quality "seed location" for the Argos system.

- This should be done near your deployment site rather than at a remote location.
- If you are in an area without an Internet connection, please refer to "Offline Mode" in your tag's user manual.

To initialize your tags, you need to turn the tags on and leave them outside in good view of the sky.

There are two options for choosing when to put the tag out.

- You can leave them out for four to six hours to give them a chance to be picked up by whichever Argos satellites are passing during that time frame. Or,
- You can run a pass prediction report via the Argos website, and place the tags outside during a known satellite pass time.

# If you need additional help, consult your tag's user guide or review the following documents:

<u>Utilizing Argos Pass Prediction Software</u> - https://bit.ly/utilizingargospasspredictionsoftware <u>How to Maximize Satellite Coverage</u> - https://bit.ly/howtomaximizesatellitecoverage <u>Argos Pass Analysis App</u> - http://bit.ly/argospassprediction