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Dear prospective client:

North Star is pleased to introduce our new line of Globalstar wildlife tracking collars. These are **satellite** collars that collect GPS locations and transmit them from the field to the www in real time via the Globalstar satellite system. The accuracy of our GPS units is within 2.5 m 66% of the time and within 5 m more than 95% of the time.

These are the first "non-Argos" satellite collars available in the world, and Globalstar has several key advantages over Argos. First of all, Globalstar offers truly real time data, from the field to the www. There is no delay and no latency in data delivery. The Globalstar constellation includes 52 satellites, so there are always 2-4 satellites in view from any location on the ground at any time. [Argos has 6 operational satellites.] The satellite airtime is also much less expensive for Globalstar than for Argos. And in terms of the hardware pricing, Argos collars are selling for roughly $3,000 – 4,500 each, whereas our Globalstar collars are priced at $2,500 - 2,600 each.

Our Globalstar collars can be configured to transmit every GPS location that they acquire in real time (typical), **or** they can be configured to log GPS locations more frequently than they transmit; in which case they store the rest for later retrieval (like a "GPS logging" collar, which are so popular these days). For example, our collars can be configured to acquire a GPS location 8 times per day and to transmit out only 1 GPS location per day, or per week (which saves on airtime costs). We can program them any way that a user might want. So if you were considering using a "GPS logging" collar, you should think seriously about using our Globalstar collars instead. This way, you will get all the benefits of a traditional logging collar with the added advantage of being able to have the collar transmit a new GPS location on a schedule via satellite. Thus, you will know where your collar is and that it is working properly on a pre-determined transmit schedule.

Perhaps our greatest advantage is our www data delivery portal, located at www.sensorlink.biz. The data delivery portal is password protected, and it provides the data from our Globalstar collars in map and tabular formats in real time. You can view your data on zoomable maps (including Google maps and Google Earth visualizations), or you can download it (as a comma delimited text file), or forward it to an e-mail address or to another server.

Also, through the use of the data delivery portal, we can offer several alarms that are new to the wildlife tracking industry. These include a "not moving" alarm (i.e., the collar has not moved outside a given radius in x days); a "no messages sent" alarm (i.e., the collar has sent no messages in x days); and a GeoFence alarm. The GeoFencing capability allows users to define a boundary of "acceptable" ranging for their animals. If the target animals move outside the GeoFence boundary, an alarm message is sent to a pre-defined recipient list. Unlike other GeoFencing methods that require laborious programming, North Star's system allows users to simply draw a polygon directly on a map in Google Earth to define their GeoFencing area. Multiple areas can be defined, saved, and applied to various collars in the field. The data delivery portal identifies GeoFencing violations and sends e-mails, text messages, or other alarms to user PCs and wireless devices.

Here are some battery life calculations that you could expect to get with our new D-cell collar:

- **Collect and transmit 8 GPS locations per day => 12-14 months**
- **Collect and transmit 6 GPS locations per day => 17-19 months**
- **Collect and transmit 4 GPS locations per day => 24-27 months**
- **Collect and transmit 3 GPS locations per day => 31-33 months**
- **Collect and transmit 2 GPS locations per day => 40-46 months**
- **Collect 8 GPS locations per day and transmit 1 per day => 15-17 months**
- **Collect 6 GPS locations per day and transmit 1 location per day => 19-21 months**
- **Collect 4 GPS locations per day and transmit 1 location per day => 27-30 months**
- **Collect 3 GPS locations per day and transmit 1 location per day => 35-38 months**
- **Collect 2 GPS locations per day and transmit 1 location every OTHER day => 45-50 months**

We are offering these collars in the following configurations: D-cell, DD-cell, C-cell, and CC-cell. The battery life calculations shown above are for the D-cell collar. The C-cell collar will provide ½ the battery life shown above, and the DD-cell collar will have twice the battery life shown above. The CC-cell collar configuration will provide the same battery life as that shown above.

Go look at some of our demo collars. Point your browser to www.sensorlink.biz. You can log in using "testing" as the user name and "collars" as the password. Click on the checkbox next to a given collar, and once the screen refreshes, click on the "Messages/Data" button up top. That will get you to the mapping application, below which you will see the tabular data.

Please contact me with any questions.

Regards,

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Pricing information shown below:

Hardware Pricing

RASSL Tracker Collars	$2500 per unit for C-cell, CC-cell, and D-cell collar $2600 per unit for 2D-cell collar

Volume discounts are available for orders over 10 collars.

Additional features that can be added:
Drop-off mechanism, 70 grams, add $350 each
VHF transmitter, 20-35 grams, add $350 each

A one-time Activation fee of $75 will be charged per unit.

Airtime Pricing

Monthly Plans:

24 transmissions per day	$120 per month
12 transmissions per day	$80 per month
8 transmissions per day	$63 per month
6 transmissions per day	$48 per month
4 transmissions per day	$41 per month
3 transmissions per day	$36 per month
2 transmissions per day	$33 per month
1 transmission per day	$30 per month

Alarm features (not moving alarm, no transmissions alarm, Geo-Fence alarm, will be billed at a rate of $5 per month for all three, if selected.)

Airtime is billed quarterly for only the airtime that you use. Partial months are prorated. Collars that are turned OFF are billed at a rate of $3 per month to keep them provisioned and ready to transmit, until the ESN is terminated.