

The Pennsylvania Game Commission is collecting bids for forty (40) Iridium GPS radio-collars to be used on American black bear. Each radio-collar must:

- Be designed for use on free-ranging American black bears, and upon request, be supported with examples of their use on current black bears studies.
- Use GPS technology to collect accurate locations and transmit location data once per day using an Iridium satellite connection.
- Store internally all location, activity, and temperature data collected during 3 years of continuous use and transmit these data using a wireless connection like Bluetooth after recovery of the collar.
- Have two-way communication via Iridium for changing GPS and VHF schedules.
- Be warranted against malfunction for 2 years without requiring recovery of a non-transmitting collar.
- Have a battery life of 3 years with 1 GPS fix every 2.25 hours, 10 GPS fixes per Iridium message (e.g., once per day), and a VHF beacon on for 10 hours per day.
- Be compatible with Vectronic replacement batteries.
- Weigh less than 740 grams.
- Contain a VHF beacon with an active 55 pulse per minute rate.
- Contain a mortality sensor.
- Contain a 3-axis activity sensor.
- Contain a temperature sensor.
- Have all wires and antennas integrated within the collar belting or housing.
- Have a belting width that does not exceed 40 mm (1.5 inches) with attachment holes sized for 2cm-width hardware, constructed of butyl and neoprene materials with beveled edges.
- Contain 2 complete sets of attachment hardware per collar (plates, bolt stems, nuts).
- Be compatible with Vectronic GPS Plus X Collar Manager software.

Bids should also include all costs associated with use of the collars for 3 years, including any activation fees and data transmission plans calculated for 3 years at 1 transmission (10 to 11 fixes) per day.

All radio-collars must be received at Harrisburg, PA within 8 weeks of vendor receiving an approved purchase order.

Questions concerning radio-collar specifications should be directed to Mark Ternent at (814) 625-3597 or mternent@pa.gov