TECHNICAL SPECIFICATIONS

Field-durable/portable Ultrasound Machine, linear rectal probe, and extension arm

The USGS, Cooperative Research Units in Reston, VA, supporting the Ecosystems Mission Area requests the purchases of (1) portable ultrasound machine, (1) transducer probe compatible with the ultrasound machine, and (1) customizable extension compatible with the transducer probe. The primary use is to support the field program of the Oklahoma Cooperative Fisheries Research Unit for assessing body condition (rump fat measurements) and pregnancy status of free-ranging elk (and other ungulates) during capture, to meet research objectives associated with wildlife management and conservation of economically and ecologically important big game species.

The equipment must have the following specifications:

1) Field-durable and portable veterinary ultrasound machine:
    a. That is field-durable including a waterproof keyboard and sunlight-readable LED display (8 inches)
    b. That operates on a battery (i.e., does not require being plugged in) for >3 hours
    c. That has swappable batteries to allow for extended field use
    d. That is compatible with external battery charging
    e. That does <u>not</u> have a hardwired transducer, such that alternative transducers can be used when working with smaller species or collecting alternative data
    f. With a weight not exceeding 7 lb to facilitate portability and efficient movement around immobilized or restrained big game
2) Transducer probe:
    a. That is compatible with the ultrasound machine
    b. That is detachable
    c. That is designed specifically for animal/veterinary use and use on large animals (e.g., bovine and equine)
    d. That has a range of 5-9 MHz with a max depth of 15 cm
    e. That has a linear design suitable for rectal assessment of pregnancy
3) Transducer extension:
    a. That is compatible with the transducer
    b. Appropriate for internal rectal applications on large animals (e.g., bovine, equine)

Delivery Address:

ATTN: TBA
USGS OK CFWRU
404 Life Sciences West
Stillwater, OK 74078-3051

Delivery Timeframe: 60 Days ARO

The USGS mission essential functions, involve providing information that supports decision makers and resource managers in the preservation of life, health and safety of the American people, and related information delivery systems for global monitoring and reporting. The resources identified in this procurement support: (i) research in wildlife management, conservation, and ecology; (ii) the ability of the USGS to capture, process, monitor, report, and distribute scientific data in a timely manner; (iii) and directly supports educational training of graduate students. In making this procurement decision, USGS considered alignment with DOI IT Transformation goals, alternative solutions, bandwidth and IT security impacts, portability, interoperability, and life cycle requirements.