

SPECIFICATIONS AND SELECTION REVIEW FOR A MAPPING GRADE GPS UNIT WITH A SUBFOOT LEVEL OF ACCURACY

UNIT SPECIFICATIONS:

A highly accurate mapping grade GPS unit will be used, in conjunction with other mapping grade GPS units, to teach NCTC's "GPS for Advanced Applications for Natural Resources" course (TEC7133). This GPS unit must be consistent with units commonly used in the U.S. Fish and Wildlife Service and other natural resource agencies, and be capable of running software used for GPS applications in the agency.

Physical characteristics: The unit must be easily carried and viewed with one hand. The unit screen must be visible in outdoor light with an adequate backlight feature, be field rugged and waterproof on its own (not requiring a second case). The unit must have dual channel tracking capabilities for real-time sub-foot level data collection.

Accuracy: Unit must be able to provide sub-foot (30 cm or less) level of accuracy in the field (i.e., without additional differential correction beyond WAAS). Less than 15 cm may be achieved through post-processing.

Software: The unit must be able to run ESRI ArcPad version 7.1 under a Windows Mobile 6.0 environment. In addition, the GPS unit data must also be compatible with "GPS Analyst" post-processing software being used in NCTC classes. A GPS unit that supports TerraSync field data collection software is also preferred.

UNIT SELECTION REVIEW:

Three units were considered for purchase. Only Trimble units qualified, as these units are the only hand-held devices manufacture that are dual-channel and run Windows Mobile operating system supporting Arcpad 7.1 software.

UNITS CONSIDERED FOR PURCHASE:

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| 1. Trimble GeoXH 2008 Series (PN 79000-00): | Unit cost: \$5,125.50 |
| 2. Trimble ProXRT GPS Receiver (PN 85350-00) | Unit cost: \$5,395.50 |
| 3. Trimble ProXRT with GLONASS (PN 85360-10) | Unit cost: \$6,745.50 |

Note: The ProXRT receivers were considered because we have existing GPS units that can link-up wirelessly to complete the GPS system.

RECOMMENDED UNIT:

The recommended unit, based on the above cost comparison and specifications, is the **Trimble GeoXH 2008 Series Receiver**.

PURCHASE INFORMATION:

Trimble GeoXH 2008 Series (PN 79000-00): Unit cost: \$5,125.50

Purchase from NCTC Account 97320-4540 (Div. Chief Approval)

Recommended Vendor: (Trimble prices are standardized; this is the closest Trimble representative)

USFWS Trimble Purchasing Contact:

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DUNS #: 834958076

CCR Active (CAGE = 1K1M4)

Alternate source: The Trimble online store: <https://partnerstore.trimble.com>