

Performance of GPS borne by Alpine ibex in Vanoise and Gran Paradiso National Parks

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23 Alpine ibex (*Capra ibex ibex*, L.) were captured from spring to summer 2003 in Vanoise National Park (France) and in Gran Paradiso National Park (Italy) and were collared with GPS 3300S (Rev. 2) collars from Lotek Wireless Inc. (Canada). Collar were fitted with VHF beacon and radio-activated drop-off system. GPS were scheduled to work one whole year with a 3 hours fix interval. In this paper, we describe and analyse the observed problems on: (1) radio-activated drop-off system; (2) belt and antenna damages; and (3) battery packs (3B42) “vented” and consequences on GPS device. Then, we analyse fix success as related to fix status (2D or 3D-locations) and F-value for 2D and 3D fixes (value ranging from F0 to F47, given with each fix). Finally, we present the results of tests concerning location accuracy.