



**CONSERVATION PLANNING AND MANAGEMENT** EcoKnowledge has the expertise to deliver restoration and conservation management programs at any scale. A variety of threatened species and landscapes will only survive if degraded environments are restored. EcoKnowledge can aid in the development of robust conservation management plans that are based on the latest scientific knowledge and best management practices.



**CONCEPTUAL, SPATIAL AND ECOLOGICAL MODELLING** With our specialised modelling services, EcoKnowledge can take a leading role in optimising broad-scale restoration planning. EcoKnowledge offers a comprehensive ecological modelling service that can guide planning and enhance conservation and natural resources management outcomes. With our diverse modelling expertise we are able to help clients formulate the problem they wish to solve before developing the most suitable modelling and data-capture approaches.



**AERIAL AND BIOLOGICAL SURVEYING** Landscape and species management is supported by EcoKnowledge's suite of specialised tracking, trapping and analytical services. EcoKnowledge has extensive experience in wildlife and land system monitoring, an essential part of natural resources management and adaptive management. In particular, we specialise in wildlife aerial surveys and animal trapping.



**DECISION SUPPORT SYSTEMS** EcoKnowledge's models and decision-support tools aid decision-makers working in natural resources management. Decisions about natural resources management are often confounded by uncertainty, differing values held by stakeholders and conflicting objectives. A Decision Support System (DSS) can help remove much of this subjectiveness by exploring the uncertainties and risks associated with alternative management strategies.



**BIO INFORMATION TECHNOLOGIES** EcoKnowledge's specialised bio information technologies enable wildlife researchers and land managers to be better informed. EcoKnowledge specialises in the design, development and manufacture of high-quality remote monitoring, GPS, aerial survey and animal tracking equipment. Our staff have unique expertise in this field, combining backgrounds in electronic engineering and biological surveying. The result is robust and quality-tested equipment that meets the demanding conditions often encountered in the field. EcoKnowledge is the most experienced private GIS company in South Australia. We use specialised GPS units to undertake weed and fauna surveys for GIS mapping. We also use ArcGIS, Spatial Analyst, Geostatistical Analyst, MapEdit and GlobalMapper for mapping and habitat modelling.

## VHF PULSE COLLAR



Animal tracking has over 25 years of experience building telemetry equipment, including very high frequency (VHF) pulse collars for birds, reptiles and mammals. Depending on the species of animal, our wide range of collars can be customised with sensors for mortality, movement activity and temperature.

EcoKnowledge is able to supply additional tracking equipment as part of a custom package. We build robust direction-finding antennas (Yagis) for towers and aircraft, as well as field-based hand-held Yagis. We can also provide single sideband (SSB) radio receivers, which have a good signal-to-noise ratio and are suitable robust for the field.

## DATA LOGGER COLLAR



There are currently two data loggers in our range. the RX3-S is the smallest data logger in our range, designed for mammals greater than 2.2Kg, followed by the RX3-SM which is suitable for mammals greater than 5.7Kg. We offer a wide range of optional features to customise collars for specific applications, such as automated timed release.

The GPS data logger range can store over 9,000 positions, with the option to download by the user or returned to EcoKnowledge for download once the collar has been retrieved (default model). Our leading-edge technology includes ultra-low power consumption for collecting location data, in order to help maximise battery life.

## GPS SATELLITE COLLAR



We design and manufacture GPS satellite collars suitable for wild animals, pests and livestock. These collars operate by sending GPS data to a communications satellite and back to our central database via the global iridium network. Our GPS satellite collar range gives the user the flexibility to change transmission settings via a secure personal login on the Animal Tracking website. Our web interface has fully customisable data fields, which allows the user to map animal positions and movements as well as output statistics in a variety of formats. All location data are stored on our server for the life of the collar, and can be downloaded as a database file at any time. Movement statistics relating to the distance travelled and average speed are available at intervals of days, weeks, years or across the total operational timeframe of the collar. Users can obtain the latest data within 30 minutes of any position fix.