## Bio

## Diversity

a strategy for Jersey





## **CURRENT LEGISLATION**

Implementing legislation will provide the legal powers:

- the Conservation of Wildlife (Jersey) Law 2000 for the protection of species and
- the Island Planning Law for the protection of Habitats through powers to designate Sites of Special Interest (SSIs)

## **EVALUATION OF NATURAL HISTORY SITES**

A Site of Special Interest may be designated due to its special zoological, ecological, botanical or geological interest.

Justification criteria for the designation of SSIs include the following (Ratcliffe 1977):

- **a) Size** In general nature conservation value increases with size. Large sites in general contain more species and larger populations of animals and plants than small ones. Chance extinction of species, either as a result of natural or man-made factors, is reduced if a species is present in large numbers. Some species require a large territory size or home range and, consequently, large sites are required to support reasonable populations.
- **b) Diversity** large numbers of species, particularly when represented by large populations are to be valued. A high species diversity is usually also reflected by a high diversity of different communities which show variation in environmental conditions.
- **C) ECOLOGICAL CONTINUITY** a site which has been occupied by a semi-natural habitat for a long time is usually more valuable than one which has only recently arisen. Ancient habitats, and particularly those, which have been subject to a uniform management regime, will have had the time to acquire rich assemblages of plants and animals.
- **d) Naturalness** the application of inappropriate management regimes, pollution or other damaging influences by man, is deleterious to ecological quality. Sites supporting largely native plants and animals are of greater merit than those with significant populations of non-native or introduced species.
- **6) Rarity** the presence of rare species adds to overall ecological value, especially when the habitat ranks highly on other criteria as well, and the populations are of a reasonable size. Habitat types too may be rare nationally or regionally.
- f) Position in an ecological unit the presence of other areas of semi-natural habitat adjacent or close to a site, enhances the value of both habitats. This factor is especially important in an island context.

where individual sites are small, and fragmentation high. The close proximity of different habitats allows for the existence of species, which are particularly adapted for life at such interfaces. Each habitat also acts as a buffer zone for the other through which the impact of damaging external influences can be reduced. Contiguity with other habitats of a similar type can be useful as links for the more mobile species. Isolated habitats do not share these advantages.

**g) Potential Value** - the potential value of a site is related to the possibility of managing it in such a way that the wildlife interest can be substantially enhanced. This depends usually on the availability of resources and the practicalities and extent of the measures required.

**h) Fragility** - sites which are highly sensitive to environmental change are usually highly valued, in that they so often represent ecosystems which are highly fragmented, dwindling rapidly, difficult to recreate or perhaps threatened with total disappearance.

i) **Typicalness** - as well as choosing the best examples of particular ecosystems, it is also necessary to represent the typical and commonplace within a field of ecological variation which contains habitats, communities and species that occur extensively or commonly.

j) Intrinsic appeal - some sites, habitats or species may be regarded as more intrinsically appealing than others from a non-scientific point of view. Similarly, some sites are more appealing and valuable as places where people may experience and enjoy wildlife and the natural world.

Anthropogenic factors while not criteria for selection are extremely important. These biological features associated with human activities have important implications for management of semi-natural areas, but also are important culturally as a part of social history.

To qualify as a SSI the area should rate highly according to as many criteria as possible. However, few sites will rate highly in all qualities. Due to the lack of choice of important habitats in Jersey, some sites may be selected for a combination of factors, while others may be chosen for a single important attribute.

