

**Guidelines for Implementing the Policy on
Off-site Ecological Mitigation Measures**

EVALUATION CRITERIA FOR ECOLOGICAL IMPACT

Ecological impact refers to a habitat or species being affected directly or indirectly due to changes in the environment brought about by a project. Besides magnitude and scale, the significance of an ecological impact is also related to the asserted importance of the habitat or species to be affected. In general, the impact on an important habitat or species will be more significant in comparison to other less important ones.

The following are some general criteria that can be used for evaluation of the significance of an ecological impact and the ecological importance of a site or a species.

(1) **Evaluating the significance of an ecological impact**

Criteria	Remarks
Habitat quality	The impact will be more significant if ecological important habitats are affected. The criteria used for evaluating the ecological importance of a site are shown in Table (2). Examples of habitat types that are considered as important in the territory are listed in Note below.
Species	The impact will be more significant if ecological important species are affected. The criteria used for evaluating the ecological importance of a species are shown in Table (3).
Size/Abundance	The impact will be greater if larger area of a habitat or greater numbers of organisms are affected. (e.g. The impact of indiscriminate clearance of woodland is more severe than that of selective felling of trees at the same site.)
Duration	Long term impacts are usually more significant than short term ones.
Reversibility	Permanent and irreversible impacts are usually more significant than temporary and reversible ones.
Magnitude	Usually the greater the magnitude of the environmental changes (e.g. increase in pollution loads, decrease in food supply), the more significant is the impact.

Note : Important habitat types in the territory

1. mature native woodland larger than one hectare
2. undisturbed natural coastal area larger than one hectare or longer than 500 metres in linear measurement
3. intertidal mudflats larger than one hectare
4. established mangroves stands of any size
5. brackish or freshwater marshes larger than one hectare
6. established seagrass bed of any size
7. unpolluted natural stream courses and rivers longer than 500 metres
8. established coral communities of any size
9. other habitats found to have special conservation interest by documented scientific studies

(2) Evaluating a site

Criteria	Remarks
Naturalness	Truly natural habitats (i.e. not modified by man) are usually highly valued. However, most areas of the territory have been modified. Generally, those habitats less modified will tend to be rated higher
Size	In general larger sites are more valued than smaller ones, all else being equal.
Diversity	The more diverse the species and communities of a site, the higher is its conservation value.
Rarity	Rarity can apply to habitats as well as species. The presence of one or more rare components will give a site higher value than those without rarity.
Re-creatability	This is also a measure of resilience. Habitats which are difficult to be resilient or to be re-created naturally or artificially are usually valued higher.
Fragmentation	The more fragmented an habitat, the lower is its value.
Ecological linkage	The value of a site increases if it lies in close proximity and/or link functionally to a highly valued habitat of any type.
Potential value	Certain sites, through appropriate management or natural processes, may eventually develop a nature conservation interest substantially greater than that existing at present. Factors limiting such potential being achieved should be noted.
Nursery/breeding ground	Such areas are very important for the regeneration and long term survival of many organisms and their populations
Age	Ancient natural or semi-natural habitats are normally highly valued. For some habitats such as woodlands, older ones are normally valued much higher than recent ones.
Abundance/Richness of wildlife	In general, sites supporting more wildlife will be rated higher.

(3) Evaluating a species found within a site

Criteria	Remarks
Protection status	Species protected under local legislations and international conventions should be given more weight than those not protected. References should also be made to those protected by law in China, especially Guangdong Province.
Distribution	Species with restricted distribution (locally or regionally) will be rated higher than those more widespread ones. More weight should be given to species which are endemic to Hong Kong or South China.
Rarity	<p>Normally the rarer the species, the more value it has. However care should be taken in assessing exotic weeds, escaped cultivars or captive species and introduced species.</p> <p>Greater weight should be given to those which are internationally rare, then to regionally rare (within South China) and finally locally (within Hong Kong) rare species. Reference could be made to Red Data Books and species lists of international conventions for conservation of wildlife ratified by Hong Kong.</p>

9 January 1997