



DECISION SUPPORT TOOLS

Decisions about the environment affect a large number of people and species, and it is important that they are made using a clear and transparent system and are based on the best possible evidence. **Envision** devises interactive scoring systems to assist decision making, and develops GIS tools for calculating the effects of activities on the marine environment, as well as models and frameworks for socio-economic impacts of coastal management.

Feature scoring system: Decisions on the conservation importance of habitats, such as a Ross worm reef, are of crucial importance to the outcome of a planning application and the need for mitigation, and should be made in a systematic and consistent way.

Envision has pioneered ways to assess and compare habitats by their features (height of reef, extent, biodiversity etc.) so the need to safeguard the habitat can be judged or, if there is a lack of suitable evidence, recommends what is required to fill the information gap.

Feature	Importance	Score	Confidence	Set
<input checked="" type="checkbox"/> Elevation	[Slider]	[Slider]	[Slider]	[?] *
<input checked="" type="checkbox"/> Consolidation	[Slider]	[Slider]	[Slider]	[?]
<input checked="" type="checkbox"/> Extent	[Slider]	[Slider]	[Slider]	[?]
<input type="checkbox"/> Patchiness	[Slider]	[Slider]	[Slider]	[?]
<input type="checkbox"/> Abundance	[Slider]	[Slider]	[Slider]	[?]
<input type="checkbox"/> Diversity	[Slider]	[Slider]	[Slider]	[?]
<input type="checkbox"/> Keystone Species	[Slider]	[Slider]	[Slider]	[?]
<input type="checkbox"/> Longevity	[Slider]	[Slider]	[Slider]	[?]

"How does your reef score?" An interactive decision support tool

Interactive habitat sensitivity to fishing activity tool

Habitat sensitivity to fishing activities: Mapping the possible effect of multiple fishing activities on seafloor habitats is necessary for marine spatial planning. **Envision** has been working with the Countryside Council for Wales exploring ways to show these effects in inshore waters by developing a system (flash tool) of assessing vulnerability of habitats to fishing techniques and combinations of gears, and predicting the potential impact.

The EU-funded SPICOSA (Science and Policy Integration for Coastal System Assessment) project involves 43 partners from across the EU working at 18 study sites from Scotland to Greece. **Envision** is part of the project team that has developed an analytical and modelling framework for assessing the effect of coastal impacts on the environmental, social and economic aspects of the coastal zone which it is testing in the study sites. Once the testing is complete, it is hoped that this framework becomes the decision-making tool for coasts across Europe.

