Scientists develop cohesive framework for assessing environmental risk

March 31 2014, by Thomas Deane

Environmental scientists from Trinity College Dublin have contributed to the development of an Integrated Biodiversity Impact Assessment (IBIA), which aims to assess biodiversity and environmental risk in a more cohesive, unified, and reliable way throughout Ireland and Europe.

Whenever a new development, plan, programme or project might impact biodiversity, law states that a comprehensive impact assessment must be made. The aim is to ensure that negative impacts on important biodiversity areas, species and the wider environment are identified and then minimised as development progresses. In some cases, proposals are shelved if the potential negative impacts are considered too great.

However, the procedural requirements and methodological steps currently differ between impact assessments. This has led to results and interpretations differing, with the scope, scale and detail of each assessment varying considerably.

Teaching Fellow in Trinity's School of Natural Sciences, Dr Ainhoa González Del Campo, who was involved in developing the IBIA, said: "The commonly fragmented approach to biodiversity impact assessment can often result in uncoordinated proposals for mitigation measures that fail to address biodiversity protection, management and conservation at the landscape level."

"IBIA has been developed as a pragmatic framework that aims at streamlining and linking biodiversity related assessment processes

required under European law. We are pleased that its publication has already been successful in promoting the uptake of the framework by practitioners throughout Ireland, and we hope that this will, in turn, inform EU and international best practice in this area."

The IBIA methodology was recently published in the high-profile *Journal of Environmental Management*. In the article, the project team outline the potential benefits of the IBIA by contrasting two case studies; in one study the IBIA was implemented and in the other it was not.

In relation to this case study comparison, the authors observe that "the framework facilitates biodiversity inclusive planning by improving communication and coordination of assessments; this results in more biodiversity aware mitigation and monitoring."

The authors also hope that IBIA implementation will greatly improve communication between research and practice through knowledge exchange and data sharing.

Provided by Trinity College Dublin