



U.S. Fish & Wildlife Service

National Conservation Training Center

Conserving the Nature of America

CSP4250 - Conservation Area Design using Marxan

Course Code	CSP4250
Course Title	Conservation Area Design using Marxan
Description	<p>Pre-requisite: A working knowledge of GIS software tools, either ArcGIS or QGIS.</p> <p>This 4.5 day training course will begin with a non-technical introduction to Marxan and its use as a decision-support tool in spatial conservation planning, followed by hands-on technical training.</p> <p>Marxan is one of the most widely used conservation and resource use planning tool globally. It can support the design of a protected area network in marine, terrestrial, and freshwater areas. Developed by Ian Ball and Hugh Possingham from the University of Queensland, Australia, Marxan supports spatial prioritization by producing transparent and repeatable results. The software can facilitate smart decision-making that accounts for a broad range of stakeholders and trade-offs in a spatially and economically efficient manner.</p> <p>COURSE OUTLINE:</p> <p>Non-technical introduction to Marxan (first 1.5 days):</p> <p>During the first one and a half days, participatory work sessions will set the context for the effective use of Marxan, aiming to help managers and technical experts situate technical work within the context of real-world planning and decision-making. The non-technical part of the course will cover topics such as:</p> <ul style="list-style-type: none">• When is Marxan the right tool? When is it not?• What questions does the tool address in the context of systematic conservation planning, marine spatial planning / integrated coastal zone management?• What inputs are required? What outputs are generated?• How can Marxan help integrate socio-economic and environmental concerns?• What are the data requirements to do so effectively?• How far can these tools go in helping difficult decisions regarding trade-offs between stakeholder groups? <p>OBJECTIVES FOR MANAGERS: To learn what Marxan can and cannot do, so they can better manage technical staff, and design processes that integrate the use of the tool in efficient ways.</p> <p>OBJECTIVES FOR TECHNICIANS: To provide context for technical work in order to improve its impact, and to help technicians understand the situations in which they should or should not invest time in using these tools.</p> <p>Hands-on technical introduction to Marxan (last 3 days):</p> <p>The next 3 days of the course will offer hands-on technical training on how to use Marxan to support the design of a network of conservation areas. Topics will include:</p> <ul style="list-style-type: none">• Addressing key principles of systematic conservation planning in Marxan• Generation of Marxan input files from GIS data• Parameter setting and calibration in Marxan• Visualising Marxan results in a GIS• Understanding and communicating Marxan results• Evaluating Marxan solutions and scenarios• Brief introduction to Marxan with Zones <p>OBJECTIVE:</p> <p>To enable trainees to successfully use Marxan to solve spatial conservation planning problems.</p> <p>TARGET AUDIENCE:</p> <p>Biologists, GIS analysts and environmental planners who are responsible for landscape conservation planning.</p>
Delivery Method	Instructor Led
Non-FWS Fee	\$1,195.00
Instructional Hours	36

Credits/CEUs	3.0
Course Content Contact	Eric Kelchlin; eric_kelchlin@fws.gov; 304-876-7453; eric_kelchlin@fws.gov
Curriculum Category	Statistics and Modeling
Registration Link	Register in DOI Talent
DOI TALENT Course Type	ILT
College Credit Name	Semester Hours
College Credit Value	2

Schedule: CSP4250 - Conservation Area Design using Marxan

Start	End	Session Information	Location	Session Contact
7/15/2018	7/19/2018	For registration questions: sharon_howard@fws.gov For course content questions: eric_kelchlin@fws.gov Class begins at 8:00am on the first day and ends at noon on the last day	National Conservation Training Center (NCTC)	sharon_howard@fws.gov