

GSEFM Forest Fragmentation and Structural Diversity Indices: Product Sheet

Product Description:

Environmental indicators are a key element in describing environmental changes and pressure. Environmental indicators provide information that is considered to be critical to understanding the development of environmental problems. Indicators can be used to express the condition of complex forest systems, condensing the complex spatial configuration of objects into a manageable and understandable message.

Indicators available:

Area metrics

Description	Area proportion of one class type in % of a specific landscape
Unit	- % per km ² - % per NUT-3 - % to whole area

Patch metrics

Description	Total number of patches or their relative proportions in a given area
Unit	- No. per km ² - No. per NUT-3 - No. per whole area

Edge metrics

Description	Amount of edges occurring between patches or classes
Unit	- m per km ² - m per NUT-3 - m to whole area

Shape metrics

Description	Measure for the complexity of forest shapes
Unit	High / Low values per: - km ² - NUT-3

	- Whole area
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Core area metrics

Description	Core area metrics compute statistics about the inner central parts of patches in relation to the total patches. This metrics give information about habitat quality for certain species.
Unit	Percentage of the total core area in relation to: - km ² - NUT-3 - Whole area

Nearest neighbour metrics

Description	This index is calculated by using the minimum distance measured as edge to edge distance from one patch to the nearest neighbouring patch of the same class type. Nearest neighbour indices quantify landscape configuration.
Unit	This value averages in metres all the minimum distances of all patches to their nearest patch 'partner' within: - km ² - NUT-3 - Whole area

Diversity metrics

Description	This index measures the extent to which one or a few class types dominate the landscape index. It is providing a measure whether the test area dominated by coniferous forests or whether there a even distribution of coniferous / mixed and deciduous forests.
Unit	High / Low values per: - km ² - NUT-3 - Whole area