

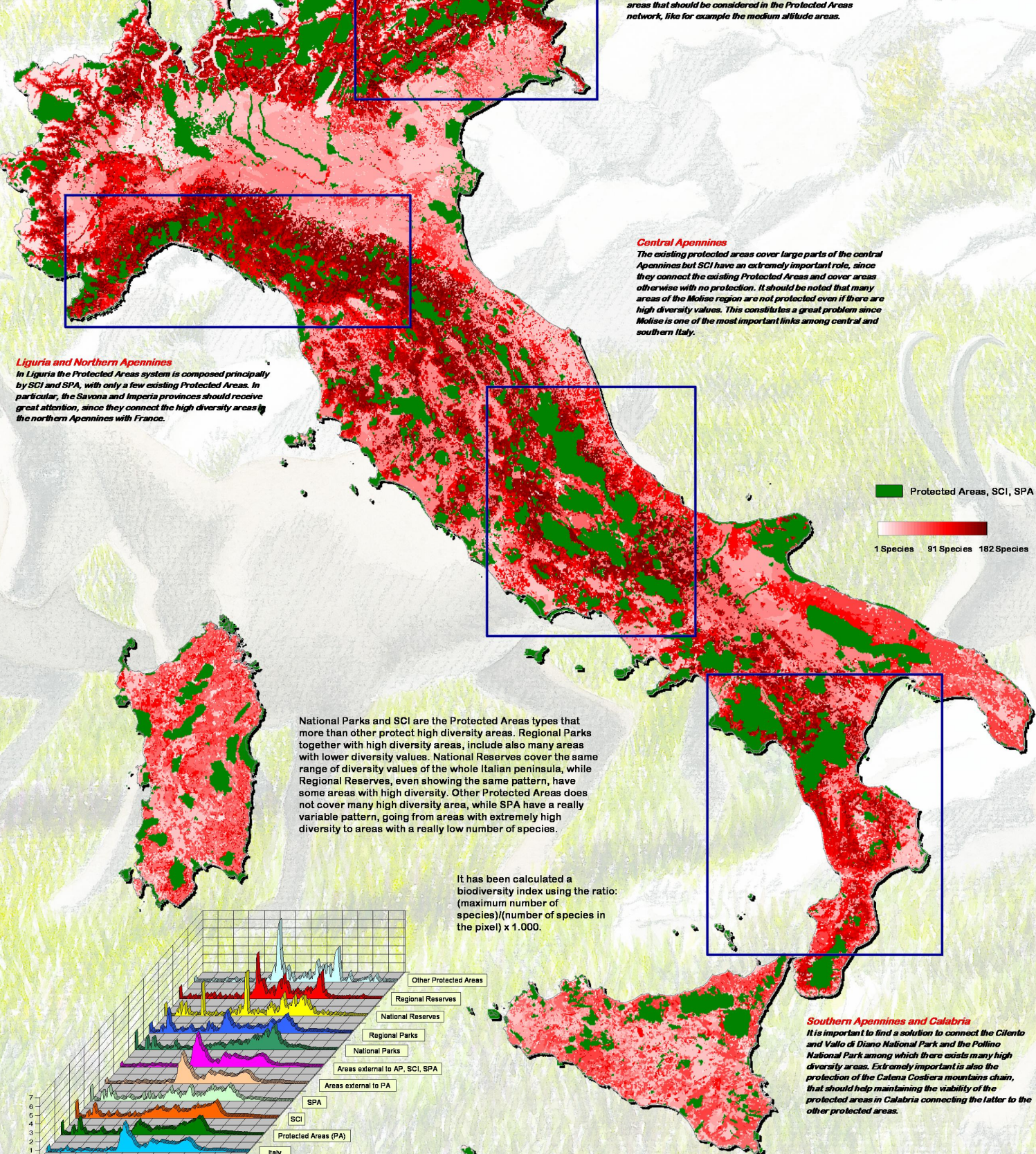
Italian Protected Areas Gap Analysis: the role of Vertebrates

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Gap Analysis is a methodology aimed to individuate the high biodiversity areas that are not subject to protection.

The conceptual framework of the analysis is extremely simple: the spatial distribution of the existing protected areas is compared with the distribution (real or potential) of the species considered, in this way it is possible to individuate the areas that more than other need legal protection.



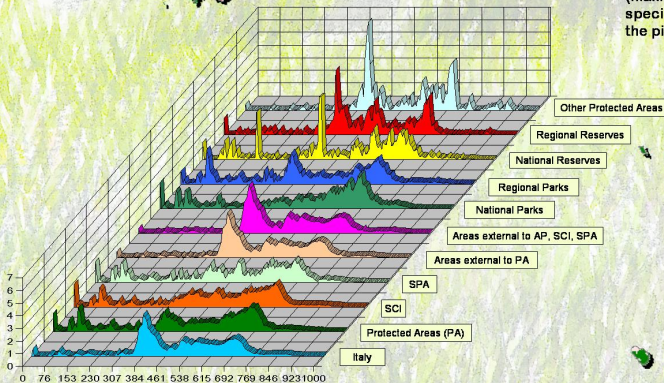
Liguria and Northern Apennines
 In Liguria the Protected Areas system is composed principally by SCI and SPA, with only a few existing Protected Areas. In particular, the Savona and Imperia provinces should receive great attention, since they connect the high diversity areas to the northern Apennines with France.

Eastern Alps
 Eastern Alps hosts large areas of high species diversity without any protection. It is important to maintain a connection among Slovenia and the Belluno Province and to improve the network of Protected Areas. Looking at the map it is also possible to individuate other areas that should be considered in the Protected Areas network, like for example the medium altitude areas.

Central Apennines
 The existing protected areas cover large parts of the central Apennines but SCI have an extremely important role, since they connect the existing Protected Areas and cover areas otherwise with no protection. It should be noted that many areas of the Molise region are not protected even if there are high diversity values. This constitutes a great problem since Molise is one of the most important links among central and southern Italy.

National Parks and SCI are the Protected Areas types that more than other protect high diversity areas. Regional Parks together with high diversity areas, include also many areas with lower diversity values. National Reserves cover the same range of diversity values of the whole Italian peninsula, while Regional Reserves, even showing the same pattern, have some areas with high diversity. Other Protected Areas does not cover many high diversity area, while SPA have a really variable pattern, going from areas with extremely high diversity to areas with a really low number of species.

It has been calculated a biodiversity index using the ratio: (maximum number of species)/(number of species in the pixel) x 1.000.



Potential Number of Vertebrates species and Protected Areas, SCI and SPA

Southern Apennines and Calabria
 It is important to find a solution to connect the Cilento and Vallo di Diano National Park and the Pollino National Park among which there exists many high diversity areas. Extremely important is also the protection of the Catena Costiera mountains chain, that should help maintaining the viability of the protected areas in Calabria connecting the latter to the other protected areas.

Biodiversity Index frequency pattern for the Vertebrates in Italy, in the Protected Areas, in SCI, in SPA and in the Areas outside the Protected Areas network and the Nature 2000 Network.

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