



## Integrating Biodiversity Conservation into the Forest Management Model



### The business case

Forests represent the primary source of raw material for Portucel Soporcel, and the company firmly believes that well-managed forests and plantations can positively contribute the ecosystem integrity of its forest land.

The company's objectives have been to develop new approaches to forest management that streamline best practices, include concepts for biodiversity conservation and support forest certification requirements. This prompted the development of a systematic methodology to preserve ecosystems, and more specifically to map out zones of special conservation interest, and create action plans to monitor them.

The company's efforts have proven to be valuable in several areas, including, most importantly, contributing to the company's forest certification objectives and adding overall value to the company.

conservation value and ecosystem integrity of its forests and plantations.

### The response

With the support of environmental non-governmental organizations and the engagement of multiple stakeholders, the company has been implementing its strategy through afforestation and reforestation projects. The methodologies behind these projects were developed in working groups, which was a valuable way to share expertise and knowledge, even if they were quite time- and resource-intensive.

The process began with an assessment of the natural values of the forests. This included a pre-evaluation of potential impacts and a full survey of habitats, flora and fauna. The result of this effort was the complete mapping of zones of particular conservation value. Based on this mapping exercise and with consideration of the conservation status of different habitats and species, Portucel Soporcel then defined action plans to guide the forest project team and ground staff through the implementation phase and to support the subsequent establishment of relevant monitoring programs.

Examples of practical measures that have been supporting the implementation of the forest strategies include:

- Planting of selected genotypes based on long-term knowledge of their behavior and adaptation to soil type and climate;
- Stakeholder consultation on International Union for Conservation of Nature (IUCN) Red Listed species, a comprehensive inventory of the global conservation status of biological species;
- Identification and preservation of existing valuable habitats and natural/semi-natural vegetation within the plantations;
- Creation of protective buffer zones around water courses or other essential habitat components;
- Preservation and enhancement of wildlife corridors and other connectivity features;
- Promotion of structural diversity through a mosaic

### The issue

The Portucel Soporcel Group manages approximately 120,000 hectares of forest comprised of eucalyptus plantations (around 72%) and also cork oak, pines, other conifers and broad-leaved species, as well as several patches of natural and semi-natural habitats. The diversity and significance of natural values in these areas means that Portucel Soporcel needed a strategy that systematically evaluates, plans and monitors the

of species, clones, age classes, habitats and naturally or artificially created habitat transition zones (or discontinuity strips);

- Observance of seasonal transitions for optimum alignment with the biological cycles of flora and fauna of concern, in order to minimize negative soil and water impacts and strengthen natural resistance to pests and diseases.

### The results

By the end of 2011, 50% of the company's forest land was covered by a Conservation Action Plan. Approximately 10% of the whole estate, representing about 12,000 hectares, was classified as a "zone of conservation interest".

Management units within these zones of conservation include 43 distinct habitat types that are representative of the protected habitats in the National Network of Protected Areas and the Natura 2000 network for Portugal. Eight of these 43 habitat types are considered priority habitats, including temporary Mediterranean ponds, endemic juniper forests and alluvial forests of ash and alder. Other habitats include dehesas (wooded pastures) with evergreen oak, Mediterranean sclerophyllous forests of cork oak and holm oak, and riparian forests with willow and poplar galleries.

The integration of biodiversity conservation into Portucel Soporcel's forest management model and the development of conservation actions plans has proven to be very valuable; for example, in better understanding the company's biodiversity impact in sensitive areas, raising awareness among employees, protecting areas of special natural value and improving forest plantation management. The focus on biodiversity conservation has also contributed to the achievement of the company's forest certification objectives and has added overall value to the company.



#### FURTHER INFORMATION

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