CEMEX – BirdLife Case Study:
Soto Pajares Biodiversity Action Plan, Spain

Site: Soto Pajares, Province of Madrid, Spain

Summary:
During 2012, SEO led on the development of Baseline Surveys for CEMEX Espana. SEO employed recognised scientific survey methods in order to establish quality baseline data. Towards the end of the survey period, SEO identified actions and objectives to implement during the next phase of work in 2013.

Aims:

- Gain knowledge of the biodiversity found in within the boundary of the site (biodiversity baseline)
- Develop an understanding of patterns of avian abundance in habitat sampled and to detect “hotspots” for biodiversity as well as zones with less biological interest
- Detect species or species assemblages likely to be of interest/priorities their conservation status or population trend at a regional or national level
- Serve as a reference when undertaking actions for species or assemblages of interest identified in the baseline, as well as an evaluation tool for actions taken, so as to compare biodiversity
response to applied action. Evaluating whether actions implemented have been successful is important. It requires objective, identical systematic assessment tools in order to properly evaluate the success of the actions proposed in this Biodiversity Action Plan (BAP)

☑️ The development of this biodiversity baseline has also allowed the detection of possible pressures and threats to birds resulting from factors related to the management and exploitation being applied

Introduction:

The SEO and CEMEX Spain collaboration began in 2011. Not long afterwards, the implementation of the first phase of work – the baseline surveys – began and this coincided with the publication of version ‘one’ of the CEMEX – BirdLife Biodiversity Action Plan (BAP). The BAP was launched in 2012, followed by the launch of the BAP pilot project initiative. The idea behind this initiative was to test the BAP methodology by developing BAP pilot sites in a country within each CEMEX Global Region; Spain was selected as the country for the CEMEX Mediterranean region and Soto Pajares the site.

The development of pilot projects is tied to the need to prioritise action at sites identified as ‘high priorities’ for CEMEX under the CEMEX – BirdLife Scoping Study. In this study, sites designated as a high priority overlap with globally important areas of high biodiversity values. The Soto Pajares quarry site sits within both an area designated under the European Birds and Habitats Directives as a Specially Protected Area and a Special Area of Conservation, making it a high priority for the CEMEX – BirdLife Global Conservation Partnership Programme.

This project is unique amongst the pilot projects because CEMEX Spain is fortunate to have not one but two partner NGOs; the BirdLife Partner SEO and a local organisation called Grupo Naumanni. SEO focussed on avifauna surveys, threats, opportunities and recommendations, Grupo Naumanni’s focus during the project was on flora and all the non-avian fauna.

Surveys

SEO’s initial focus was on developing a thorough understanding of the avifauna present on the site by undertaking baseline surveys. In line with the CEMEX – BirdLife International Biodiversity Action Plan standard, the idea here was to identify ways to improve operational practices and ensure birds and wider biodiversity could be protected or their local conservation status improved.

Methods

SEO employed three different techniques to develop the biodiversity baseline; sampling using line transects, sampling stations (point transects) and intensive sampling. Eight line transects were sampled on foot (500m each) and repeat samples were taken throughout the year twice a month (~22 samples). The aim was to sample as many different habitats as possible. Ecosystems adjacent to the site were also sampled.
Knowing that there are significant water bodies on site and that these had the potential to support various species/groups, **point transects** were used to sample birds seen and heard up to a certain distance. Samples were repeated at the same frequency as the line transects. Finally, an **intensive sampling** method was used during the breeding season, the idea being to try to detect species of special conservation interest and determine their breeding success by identifying zones where population size of species of conservation interest could be estimated.

**Results**

SEO described all species recorded on the site and in the surrounding ecosystems. Each species’ abundance is illustrated using a histogram illustrates species abundance at different times of year. SEO also tabulated the number of species in each family to present an overall snapshot of how well represented each family was in space and time.

**Actions and Objectives**

Given the diversity of habitats on site, the presence of interesting features such as riparian corridors, and the range of operations on site from gravel sorting, transportation to active extraction, it was important the actions reflected the range of real or potential threats and opportunities for species and habitat conservation as well as prospects to enhance the site for birds and other wildlife.

The approach taken had to factor in not only the baseline data and recommendations made by the BirdLife Partner, SEO, but also those data and recommendations from Naumanni. SEO divided their action plan section as follows:

- Actions to enhance habitat (e.g. actions include those designed to extend and restore riparian forest along Rio Jarama as well as creating shallow lakes for shorebirds)
- Species-specific actions (include the creation of a floating island and nest boxes for passerines and non-passerines, targeted at birds round during surveys of the site, and those found off-site with the potential to colonise)
- Socio-environmental actions (actions involving awareness-raising and public use of the site)

Naumanni’s recommendations are also integrated, and these include topsoil conservation, habitat restoration, and the creation of micro-features for mammals and insects of conservation interest.

**Next steps**

Before moving ahead with implementing the actions identified, SEO, Naumanni and CEMEX Spain must agree on the exact scope of work, budget and start date.