

Environmental studies – biodiversity preservation

Jan.
2024



CFP ZIBAC – Update of the biodiversity study of the community territory – inventory of four sites within the framework of the ZIBAC project call

The acceleration of industrial decarbonization requires anticipating all impacts of associated industrial developments. All decarbonization levers—including the development of low-carbon energy, increased use of recycled materials in production, industrial CCUS equipment for residual emissions, and the deployment of energy transport infrastructure—require additional land and the reorganization of industrial sites. To account for the environmental and biodiversity impacts of these developments, it is necessary to improve knowledge of the natural heritage of the Dunkerque Urban Community (CUD) territory.

Industrial development projects in the area must, following the “ERC” logic (avoid, reduce, compensate), propose solutions to preserve biodiversity and ensure the functionality of ecological continuities (green and blue networks), particularly by identifying obstacles or barriers to species dispersal.

The actions carried out in this context are also part of the implementation of the Natural Site for Compensation, Restoration, and Renaturation (SNCRR) project, which aims to facilitate the application of environmental compensation principles for developments planned or ongoing around the Grand Port Maritime de Dunkerque (GPMD).

This study focuses on updating knowledge of plant biodiversity across the Dunkerque Urban Community territory through targeted surveys of priority species—namely indicator species and species of high heritage value (indicative of climate change, emblematic Dunkerque landscapes, indicative of Natural Areas of Floristic and Faunistic Interest, European to regional red lists, etc.). For some of these species, the territory bears responsibility for preserving populations. Led by CUD services with support from the Bailleul National Botanical Conservatory, this study will create and feed a Biodiversity Observatory database for species monitoring, organize the management of green and blue networks, and assist project developers in defining measures to comply with the ERC doctrine.

In 2024, the Bailleul National Botanical Conservatory conducted surveys on four sites. These inventories aimed to characterize priority elements (heritage-interest species, protected species, invasive exotic species, etc.) and identify possible complementary management measures. The sites surveyed were :

- the western part of the Gravelines green and blue network ;
- Armabouts-Cappel Lake ;
- the meadows north of Téteghem Lake ;
- the site of the Intercommunal Syndicate of Flanders Dunes (SIDF) located east of Téteghem Lake

Across the four sites studied, the priority elements identified are associated with two habitat types: wetlands and sandy substrates. Among the species of heritage interest observed, the following can be cited :

- for species associated with wetland habitats: Gérard's rush (*Juncus gerardi*), distant sedge (*Carex distans*), marsh dock (*Rumex palustris*), horned pondweed (*Zannichelia palustris* subsp. *palustris*), early marsh orchid (*Dactylorhiza incarnata* subsp. *incarnata*), southern marsh orchid (*Dactylorhiza praetermissa*), and sea club-rush (*Bolboschoenus maritimus* ;
- and for species present on sandy substrates: sand sedge (*Carex arenaria*), sand timothy (*Phleum arenarium*), and lesser hawkbit (*Leontodon saxatilis*).

The surveys made it possible to propose management measures for the four sites studied. These measures generally involve extending wetland habitats through the creation of new water bodies, topsoil stripping, and the regrading of banks with gentle slopes. Topsoil stripping is also recommended in sandy areas to promote better development of vegetation and species associated with sandy habitats.

RÉSUMÉ

Accelerating the decarbonization of industrial sites requires anticipating impacts on the environment and biodiversity. With this objective, and in order to implement a Natural Site for Compensation, Restoration, and Renaturation (SNCRR), the Dunkerque Urban Community entrusted the teams of the Bailleul National Botanical Conservatory—an organization with which it regularly collaborates—with enhancing knowledge of biodiversity across its territory.

This survey focused in particular on four sites within the territory that are part of the CUD's green and blue networks.

The surveys made it possible to propose management measures for the four sites studied. These measures generally involve extending wetland habitats through the creation of new water bodies, topsoil stripping, and the regrading of banks with gentle slopes. Topsoil stripping is also recommended in sandy areas to promote better development of vegetation and species associated with sandy habitats.

This work will help inform SNCRR development studies and support the development of ecological corridors in line with CUD planning.

Ce document est diffusé par l'ADEME

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CITATION DE CE RAPPORT

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May 2025

Inventory of four sites as part of the ZIBaC call for projects –

Partnership with the Dunkerque Urban Community

94 pages

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