

## Location: Netherlands

### Study

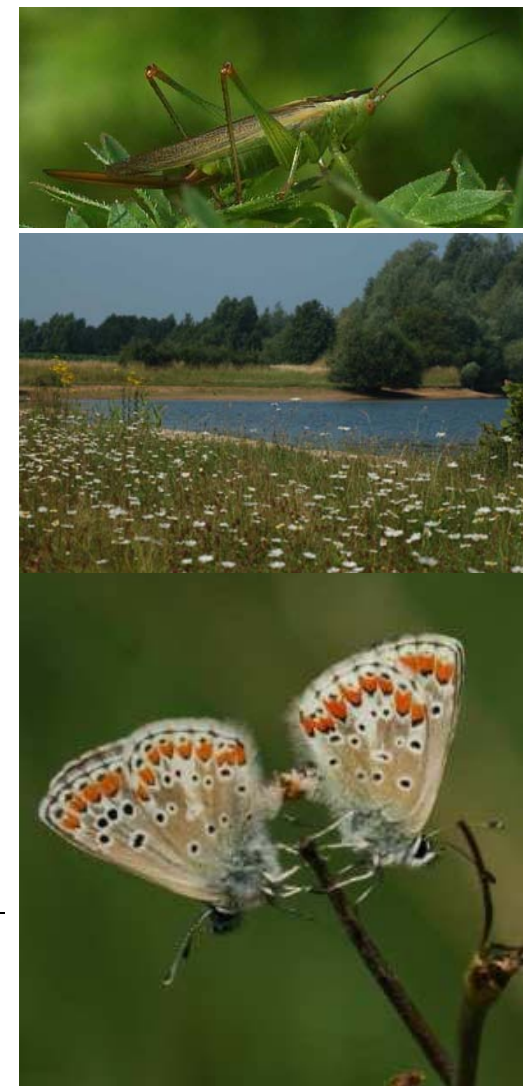
The 'Omsteg' near Netterden and 'proefproject Grensmaas' at Meers were used for sand- and grind extraction and should have yielded new nature in the past few years. The quality of the current biodiversity in these areas is studied. For this purpose the indicating groups butterflies, odonates (dragonflies and damselflies) and grasshoppers were studied.

The main conclusion from this study is the increase of biodiversity and nature development in both investigated former extraction locations since the beginning of the extraction work. Well executed land management and good aftercare from the extraction companies is the key factor for increasing biodiversity. Both projects were targeted as 'new nature' and it is concluded that these locations yield a very positive function in the landscape for nature and recreation.

In total 59 species of butterflies, odonates and grasshoppers were found in both areas. These species are related to the nature development and quality. The 'Omsteg' and 'proefproject Meers' yield different results. Many indicative species of pioneer situations were found in 'de Omsteg' whereas in 'proefproject Meers' no indicator species were found. The development of insects in 'proefproject Meers' already had a optimum and is slightly declining. In both cases land-management is the key to these results.

The current nature development at the Omsteg results in biodiversity improvement. New created nature thanks to sand and grit extraction in the Agricultural landscape has become an important stepping-stone function of high quality in the surrounding area. The supplied aftercare of the extraction company and well executed land-management is the main foundation for this rich development.

The grind bank biodiversity of the Maas River at Meers is decreasing but still of good quality. Inland situations are more declining due to eutrophication. In these areas particular small treatments can maintain and improve nature quality. They will be recommended in this report.



### Partners

Dutch Butterfly Foundation & Cascade (Dutch Association of aggregates producers)

