Summary

Modelling the flight paths of birds; Confrontation with wind turbines Wim Heijligers, Roland van der Vliet & Carolien Wegstapel

Natura 2000, barnacle goose, flight paths, wind farm, Friesland

Simflux provides insight into the flight paths (both direction and density of birds) between resting and feeding sites for waterfowl. The model clarifies whether birds in a foraging area may or may not come from different Natura 2000 sites. It also becomes clear whether birds from one Natura 2000 site fly to several foraging areas, and in what numbers. More specifically, Simflux is able to determine the number of crossings of flight paths of waterfowl with windparks or infrastructure, including the size of this flight path. Through speciesspecific collision probability these crossings can be translated to the number of bird collisions and also to hotspots for collision victims. Simflux can thus semiquantitatively assess the impact of, in this case, wind turbines on the conservation objectives of Natura 2000 sites.