Investigations of Bird Collisions in 2 Wind Farms

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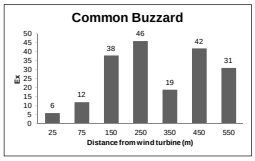
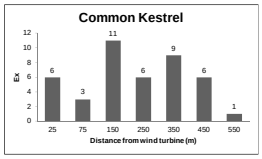
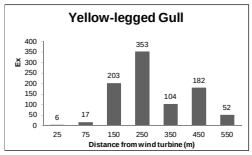
Wind energy is now recognized as the fastest growing energy technology in the world. Wind farms are sited in exposed areas to ensure high average wind speeds to maximize energy capture. Such locations often comprise some of the most important and sensitive habitats, so there is a need to ensure that potentially damaging effects are avoided or, if not possible, minimized or mitigated.

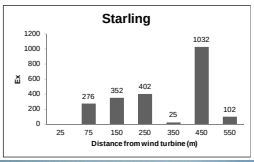
What kind of risks do wind turbines pose to birds?

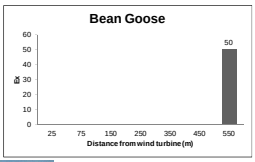
- Bird collisions;
- Change of migration routes and local flight paths;
- Direct habitat loss and disturbance.
- We investigated on two wind farm places the flying patterns and feeding attitude of birds, especially geese species. Between November 2010 and November 2011 in 2 two-week periods we visited the researched places and checked up the flying altitude, the flying direction and the feeding places of birds. We investigated the bird collisions, caused by wind turbines in this two wind farms, too.
- **We found in a 1-year-period 1-1 Ex. Yellow-legged Gull (*Larus cachinnans*), Black-headed Gull (*Larus ridibundus*) and Common Noctule (*Nyctalus noctula*) killed by collision.**
- We analyzed the flying patterns and the distances from wind turbines of many bird species. In our figures we can show preliminary results of our works with some interesting species. We found that raptors, Common Buzzard (*Buteo buteo),* Marsh Harrier *(Circus aeruginosus)* and Common Kestrel (*Falco tinnunculus),* gull species, especially Yellow-legged Gull (*Larus cachinnans*) and Starling (*Sturnus vulgaris*) occurred in high numbers within the wind farm area. Conversely, goose species occurred lower numbers than expected in the wind farm area.

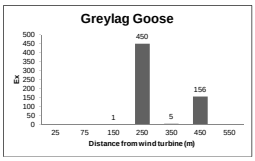


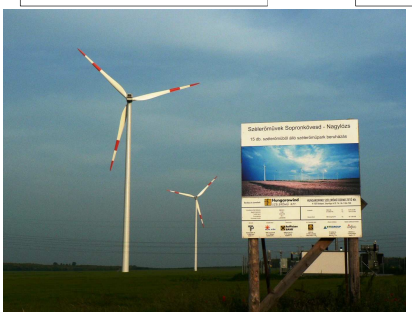




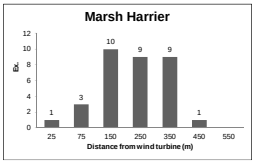








Wind farm nearby Sopronkövesd



Killed bat due collision

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