## LIVING WITH GULLS

Stienen Fric

Research Institute for Nature and Forest Kliniekstraat 25, B-1070 Brussels, Belgium E-mail: eric.stienen@inbo.be

During the breeding season, the non-aggressive Sandwich Tern Sterna sandvicensis forms a close association with more aggressive species. In northern Europe, the terns always breed in the proximity of Black-headed Gull Larus ridibundus colonies. The gulls offer protection against predators. The associative nesting with the gulls means that the gulls themselves sometimes rob a tern egg or a chick and steal fish that is meant for the tern chicks. The robbing behaviour of the gulls can have serious consequences for the growth and survival of the tern chicks and shape the foraging decisions of their parents. Sandwich Terns are single prey loaders that carry the fish one at a time to their nestlings holding it crosswise in the bill. The conspicuously carrying of their prey makes them easy victims for prey stealing gulls. As a consequence they are forced to live with the consequences of high rates of food loss to kleptoparasitising Black-headed Gulls. Apparently, Sandwich Terns are well adapted to the kleptoparasitic behaviour of their associative breeding species. If they cannot avoid the attacks of the gulls by moving away from them, they increase their foraging effort and compensate for these losses. Although the terns live in a highly unpredictable environment they have evolved several specialisms that make them very vulnerable:

- 1) they form a breeding association with Black-headed Gulls
- 2) they are very restricted in their prey choice and
- 3) they have a very particular habitat preference for breeding

They have evolved a nomadic behaviour that is very different from most other tern species. This flexible behaviour enables them to overcome potential drawbacks they may encounter from their specialism.

## References

Stienen E.W.M. 2006. Living with gulls: trading off food and predation in the Sandwich Tern Sterna sandvicensis. Allterra Scientific Contributions 15. Alterra, Wageningen. p.192.