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# Evidence based nature management



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## Case: Human disturbance of waterbirds in protected areas

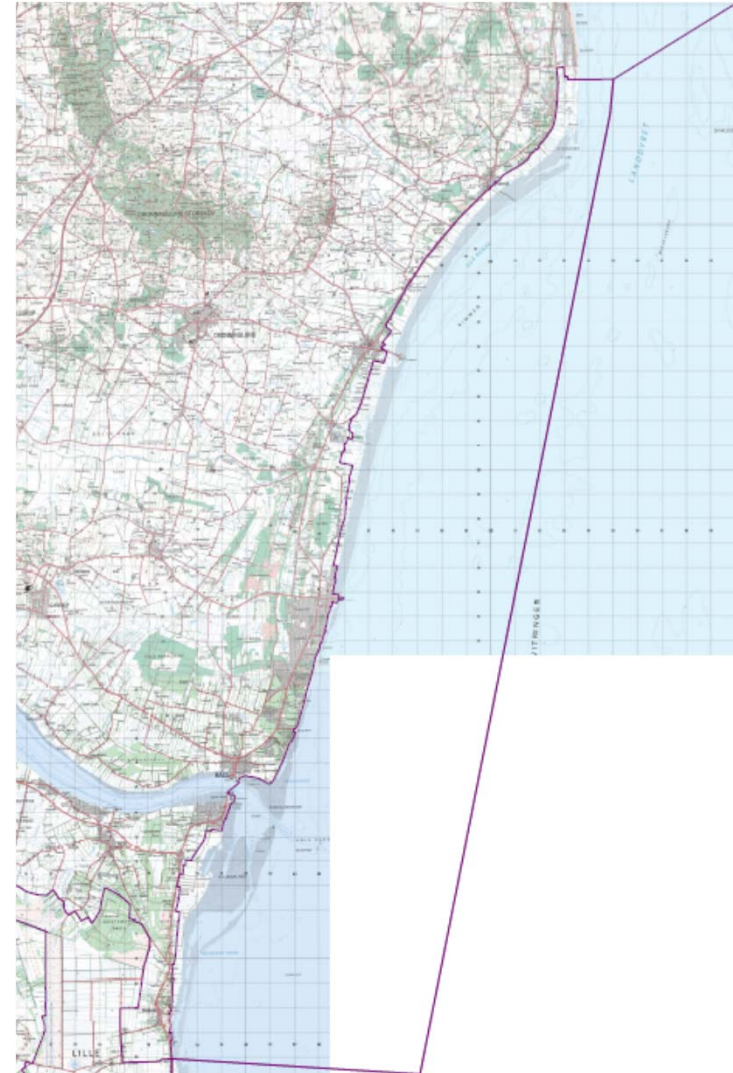
- Do water sport activities during the breeding season have negative effects on breeding Little Tern *Sterna albifrons*?





## SPA: Aalborg Bugt

- Classified in accordance with the EC Bird Directive (1979)
- Breeding Little Tern (Annex I)
- Managers must reject projects that will negatively affect protected birds





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## Challenges for managers

- Relevant questions:
  - How do Little Tern react to human disturbance?
  - How do different types of disturbance affect Little Tern?
  - How do different types interact with existing levels of disturbance? (Cumulative effects)
  - How can the effects of different types of disturbance be mitigated?



## Solving the case

- Using a few review articles on human disturbance
- No external consultants were used
- Consulting local ornithologists as to the breeding habits in the area
- Conclusion: The arguments for rejecting the project were not strong enough



## Terms for management

- *Managers are often generalists, not experts!*
- *Managers often work under time stress*
- *Managers often work in a political system, where arguments must be strong to go against development and recreation!*



## Promoting evidence based management

- Cooperation about experiments directed towards management issues, eg. human disturbance of waterbirds
- Collecting and processing existing and future knowledge into guidelines for management
- Establishing of professional networks between scientists and managers





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