

PRACTICAL ASPECTS OF AERIAL SURVEYS



BREWED

IN DUBLIN

GREG DONOVAN
INTERNATIONAL
whaling
commission





GENERAL issues

- Objectives
- Aerial vs shipboard
- Type of plane
- Track design
- Methods and equipment



is it A SHIP - OR is it A PLANE?

- Coastal waters/coastline
- Species
- Endurance/airport availability
- Prevalent weather conditions
- Equipment
- Sea sickness vs psychology!
- COST!



the PLANE

- **safety:**
 - pilot; engine; endurance;
- **visibility:**
 - high wings; wheel
 - position; bubble
 - windows
- **equipment:**
 - GPS; intercom; electrical supply; cameras; temperature probe; altimeter





TRACK DESIGN

- as for ships
- predetermined
- use available information to stratify - more effort in higher expected density areas
- endurance/airport availability
- strategy for bad weather



methods

- Will depend on objectives
- species characteristics; school size
- cue-counting
- line transect
- Combination
- $G(0)$
- data required: weather/effort; sighting



EQUIPMENT

- **training programs**
- **inclinometer/angle board**
- **computer: time signal/GPS**
- **[voice activated] microphones**
- **entry database**
- **simple analysis programs**



in SUMMARY

- **Can be a valuable tool for both abundance and monitoring**
- **Used successfully in many areas of the world with many species**
- **Can be cost effective even if cost per hour seems high**