

Capture and Staging

Oiled Wildlife Response Course 21st – 23rd June 2006

New Zealand Wildlife Health Centre

John Andrew
Department of Conservation
New Zealand

To Kōwhiri
Ki Pākehanga

Institute of Veterinary, Animal
and Biomedical Sciences



Overview

- Space and approach
- Capture nets, traps & towels
- Transport boxes
- Transport
- Field stabilisation



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Technique choice

- Welfare
- injury
- disturbance
- environmental damage
- operator safety



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Concepts in Animal Capture & Restraint

- Capture
- Restraint
- Immobilization
- Anaesthesia
- Sedation
- Tranquillization
- Physical
- Chemical
- Targetted
- Indiscriminate
- Individual
- Mass capture
- Release/recapture



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Space

- Individual distance
- Social distance
- Critical distance
- Flight distance



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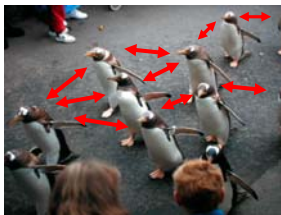
Space

- Individual distance
 - preferred personal space between members of the same species
- Social distance
- Critical distance
- Flight distance



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 - that distance which an animal maintains with other members of its social group
 - group cohesion
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 - the space within which an “enemy” may approach before provoking agonistic behaviour
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Space

- Individual distance
- Social distance
- Critical distance
- Flight distance
 - the distance to which an animal will tolerate an approach by an “enemy” before it begins to escape (fly or run)



...or perhaps slither

Attractants & Deterrents

- | | |
|--------------|------------------------|
| • Decoys | • Predator mannequins |
| • Bait | • Predator silhouettes |
| • Tape lures | • Reflective tape |
| • Camouflage | • Balloons |
| • Spotlight | • Propane cannons |
| | • Klaxons |
| | • Twinklers |
| | • Biosonics |
| | • Helicopters |



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Traps & nets

- Fall trap
- Funnel trap
- Fyke net
- Cage trap
- Noose or snare mats
- Stationary nets
 - Trammel
 - Mist
- Dynamic set nets
 - Cannon
 - Curtain or draw
 - Drop
 - Aerial clap
 - Bow
- Dip, hand or pole net
- Ring or thrown net
- Hook or crook



Nets

- Material properties
- Aperture size
- Net area
- Deployment
 - hoop, set, hand cast, cannon net
- Mist nets



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Applications of Nets

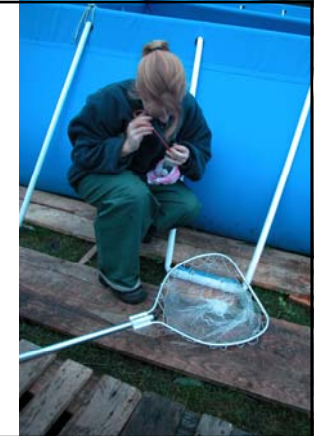
- Exclusion
- Capture
- Husbandry
 - Transport box flooring
 - Net-bottom cages
 - Pen closure
 - Insect exclusion (haematozoa, annoyance)
 - Pool roofing
 - Pool husbandry – bird handling
 - Pool husbandry – uneaten fish retrieval

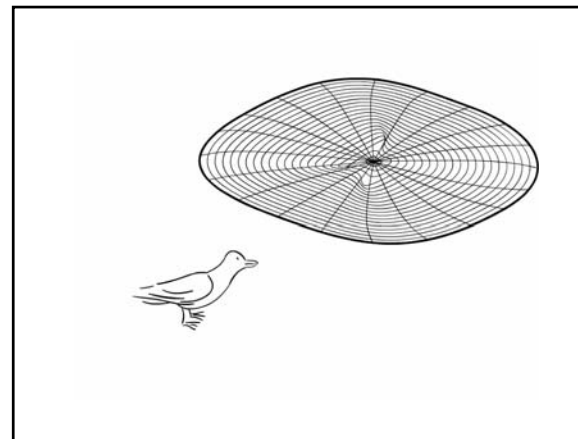
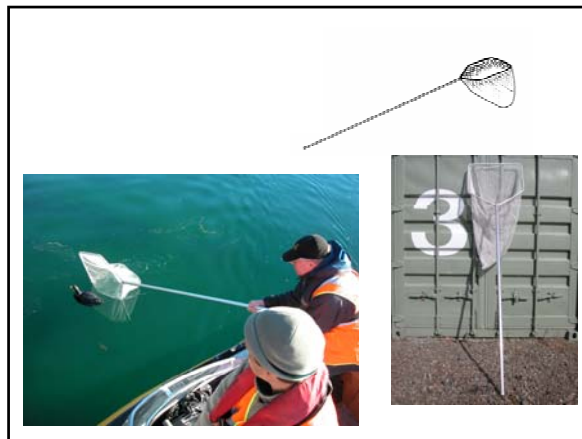
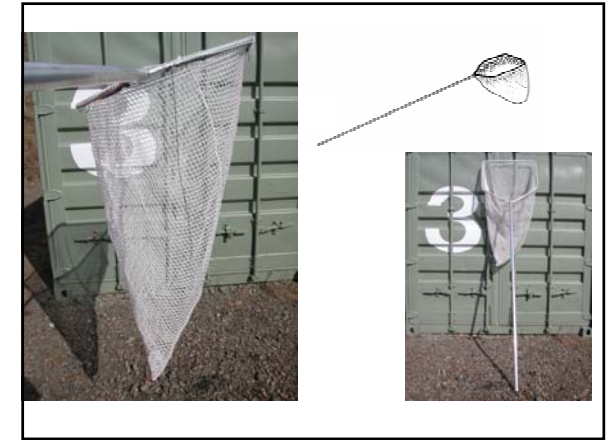
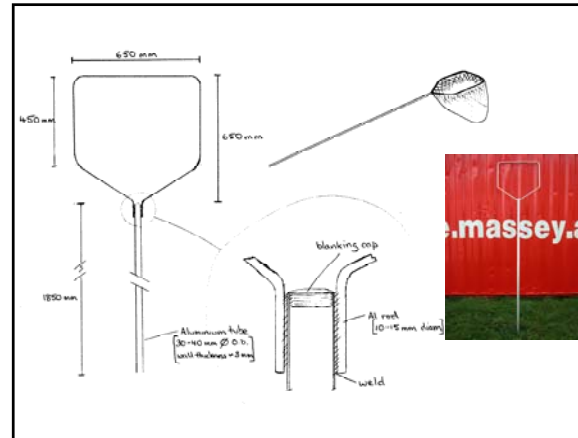


Capture nets

- Dip/hand/pole nets
- Throw nets
- Cannon nets
- Mist nets
- Drop nets
- Clap nets
- Net guns

etc....



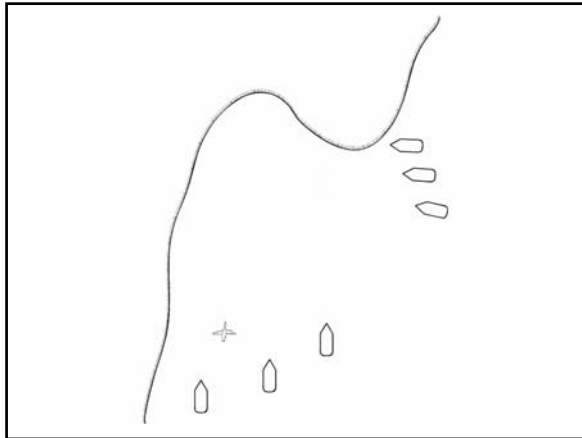


Capture Plans

- Anticipate species specific behaviours & responses
- Integrated use of terrain and physical features
- Adequate personnel & resources
- Plan, then execute decisively

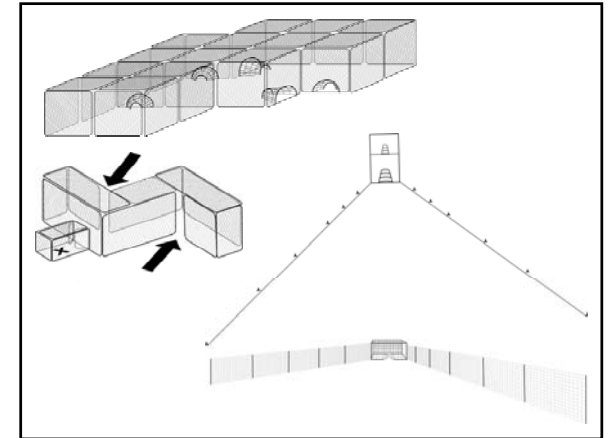


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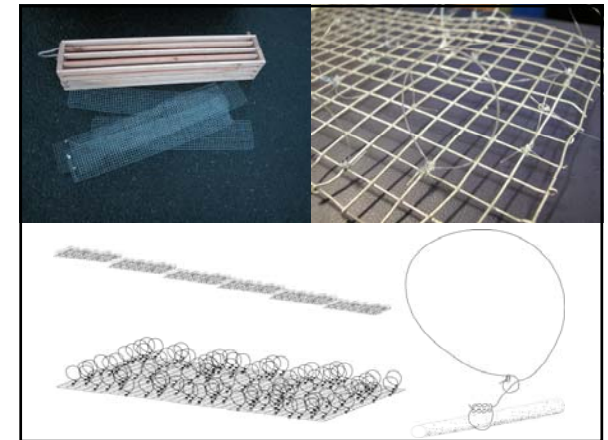


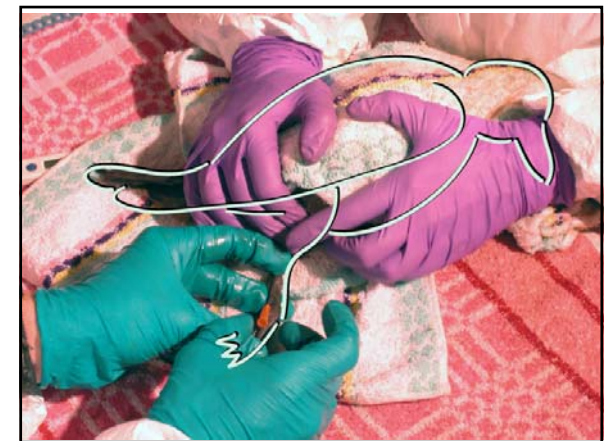
Traps

- Entrapment
 - feed bait, lure, habituation, travel route
- Time of setting
- Checking
 - routine, observation, alarms, telemetry
- Removal and release
- Health and welfare
 - shelter/exposure, water, food,



Mist nets and cannon nets





Overview

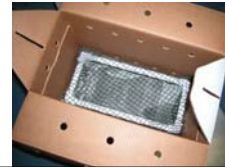
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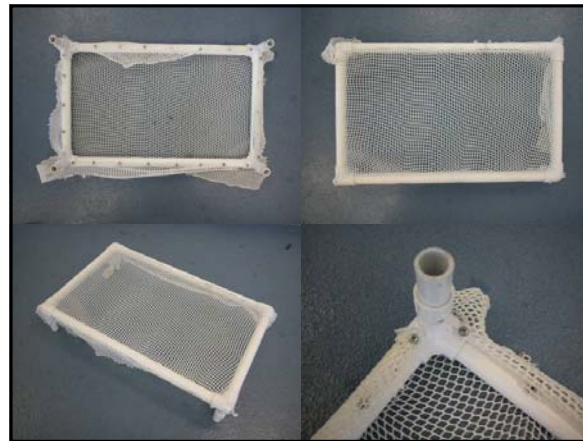
Transport box flooring

- Conforming surface
- Faecal & fluid waste falls away from bird
- Stable substrate to reduce stress
- Air circulation within container



Transport boxes

- Size appropriate to species
- Ventilation holes correct size, number and distribution
- Pet-pack “non-stack” design
- Plain cardboard or plastic “waffleboard”



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Transport and Staging

- Birds should be stabilised within an hour of capture
- Ventilation remains a critical factor during staging and transport
- Minimise noise and disturbance
- Provide protection from elements



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Hazards and Safety

- Petroleum hydrocarbons
- Environmental hazards
- Transport & logistics
- Animal-inflicted injury
- Zoonotic disease
- Personal hygiene



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