A Holistic Approach to Wildlife Risk Assessment

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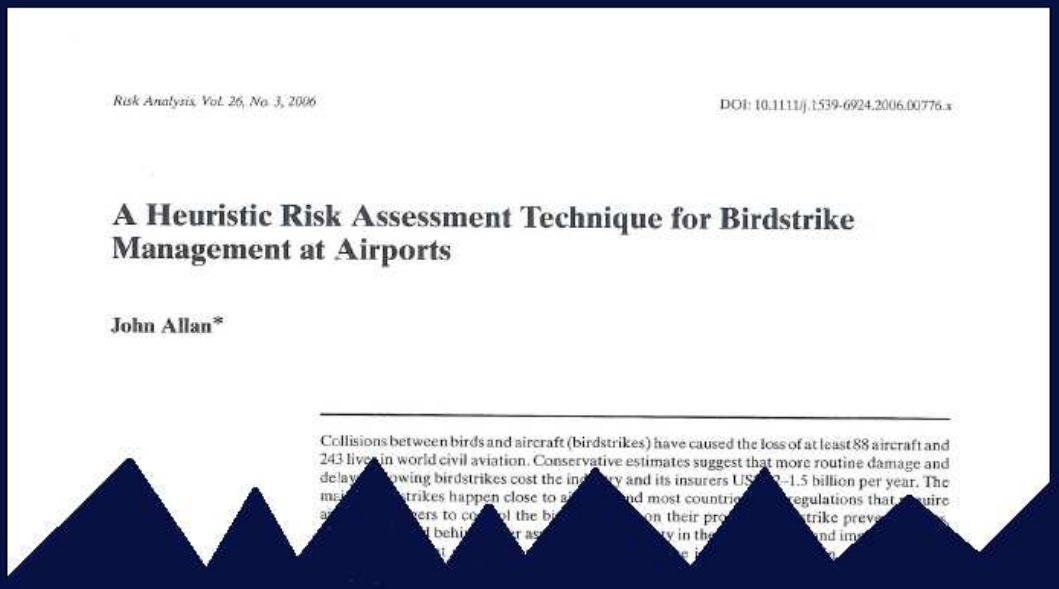
Copenhagen Airports CPH

“The only true wisdom is in knowing you know nothing”

- Socrates

Risk Assessment Matrix



Risk Analysis, Vol. 26, No. 3, 2006 DOI: 10.1111/j.1539-6924.2006.00776.x

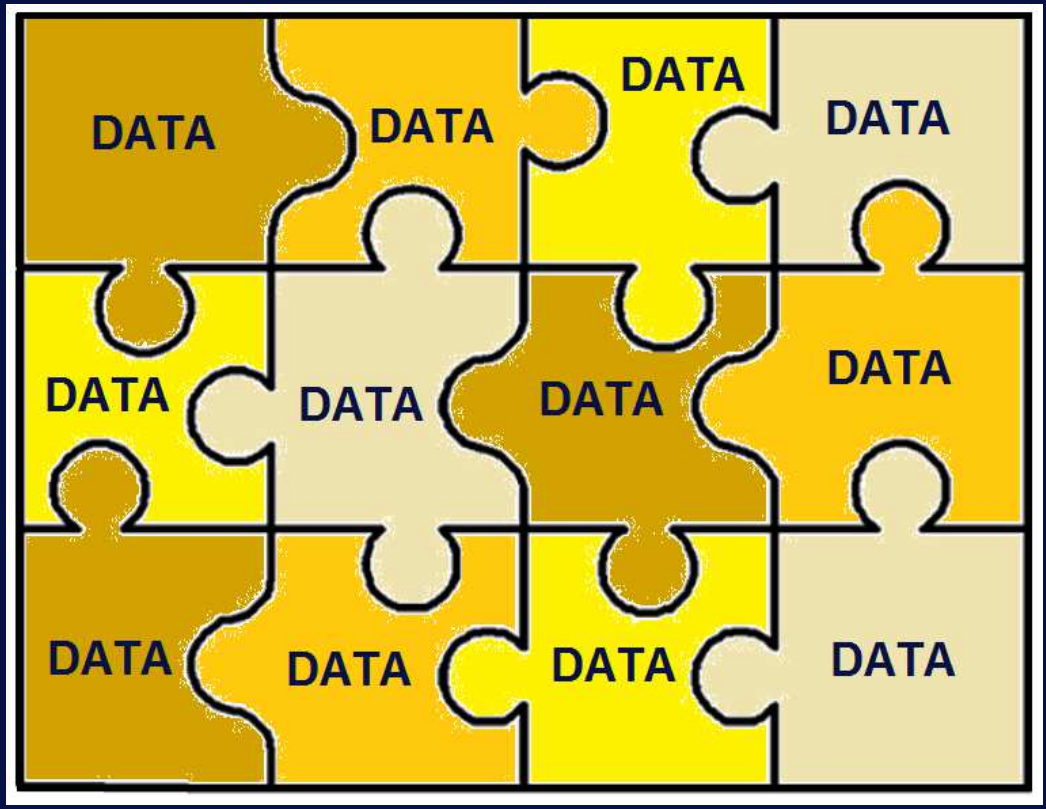
A Heuristic Risk Assessment Technique for Birdstrike Management at Airports

John Allan*

Collisions between birds and aircraft (birdstrikes) have caused the loss of at least 88 aircraft and 243 live[illegible] in world civil aviation. Conservative estimates suggest that more routine damage and delay[illegible]owing birdstrikes cost the in[illegible]ry and its insurers US$[illegible]2–1.5 billion per year. The ma[illegible]trikes happen close to a[illegible]nd most countrie[illegible]egulations that [illegible]uire a[illegible]ers to co[illegible]l the bi[illegible]on their pro[illegible]trike preve[illegible] behi[illegible]r as[illegible]y in the[illegible]nd im[illegible]

Severity / Probability	Very high	High	Moderate	Low	Very low
Very high			Barnacle goose	Greylag goose	Canada goose Grey heron Osprey Mute swan Great blackbacked gull Whitetailed eagle* Cormorant*
High		Herring gull	Rughlegged buzzard Mallard Common buzzard	Shelduck	Eurasian wigeon Pochard Redbreasted merganser Tufted duck
Moderate		Wood pigeon	Crow	Hen harrier Marsh harrier Rook	Hooded crow Caspian tern Peregrine falcon
Low	Kestrel	Shorteared owl Common gull	Merlin Domestic pigeon	Golden plover Blackheaded gull Longeared owl Woodcock Sparrow hawk	Partridge Jackdaw Magpie Tawny owl Mediterranean gull Lapwing
Very low		Barn swallow Swift Skylark Starling	House martin Meadow pipit Song thrush	Chaffinch Sand martin Nightjar Blackbird Wheatear Ringed plover Redwing	Dunlin Twite Ruff Goldcrest Common chiffchaff Brambling Willow warbler Linne Mistle thrush (Budgerigar)

Risk Assessment Puzzle



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Bird Controller Data

- Date & time
- Species
- Location on airfield
- Movement direction
- Behaviour
- Attractant
- Mitigation action

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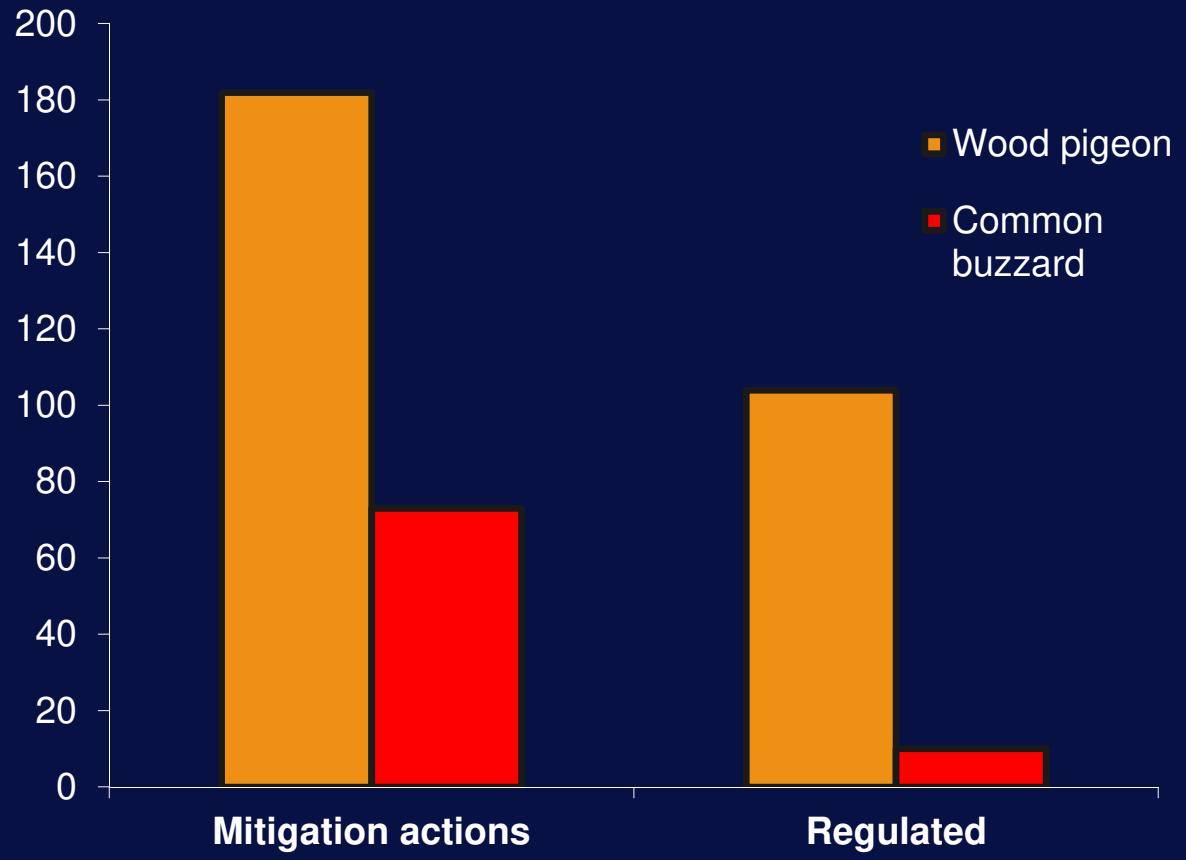
Common Buzzard vs. Wood Pigeon in 2016

Observed individuals:

Common buzzard	123
Wood pigeon	20.350



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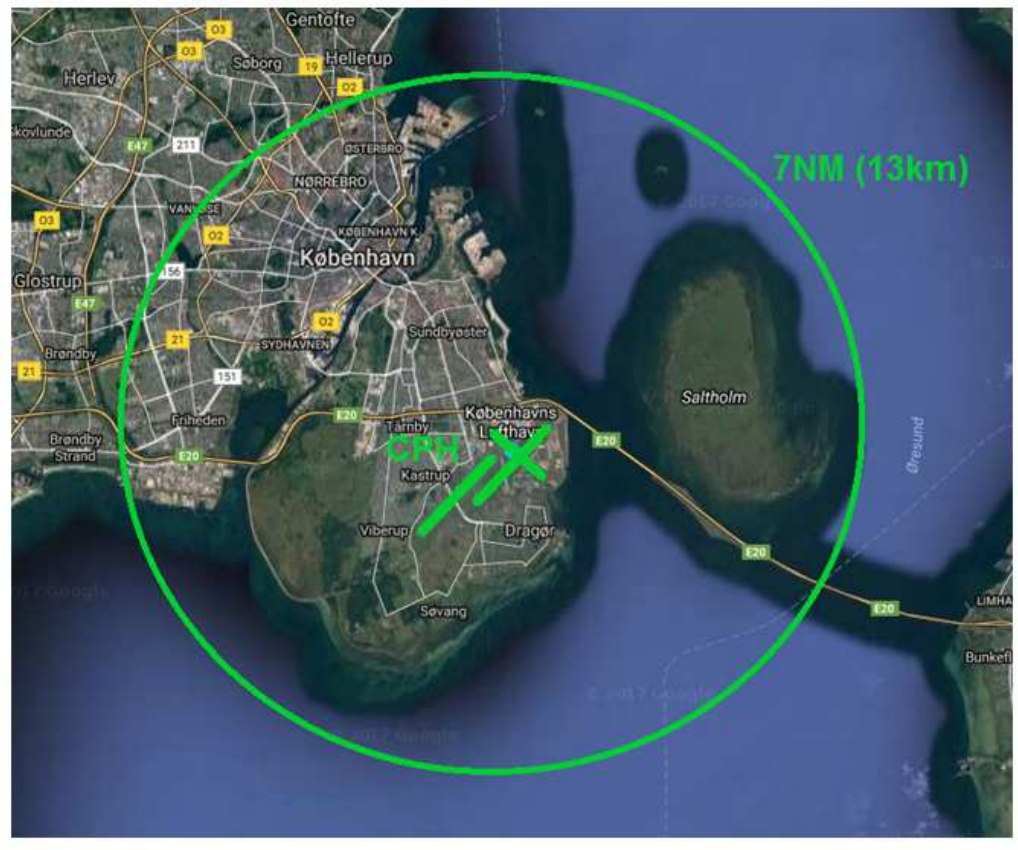

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Movement Patterns

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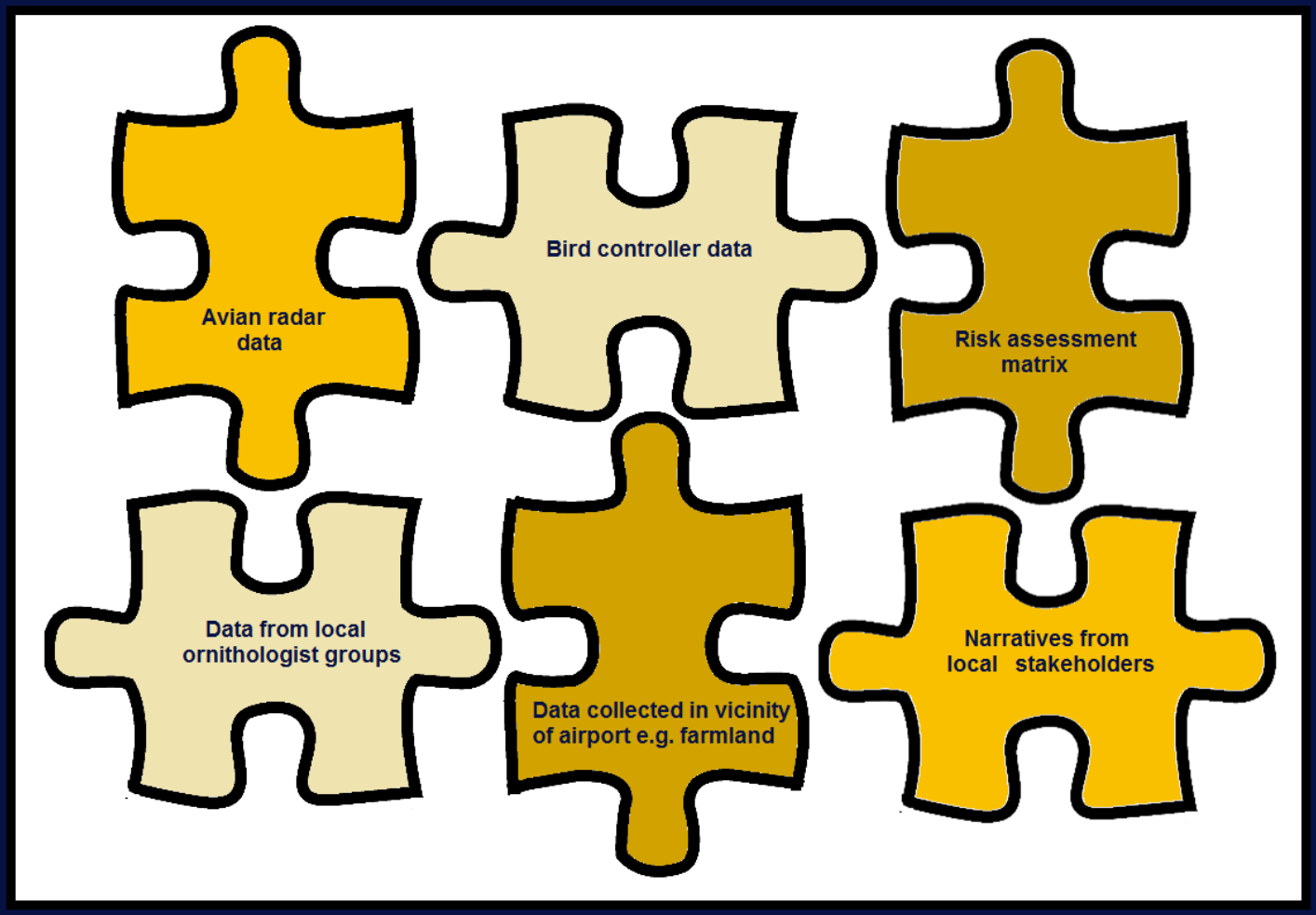
3D Avian Radar

Citizen Science

Risk Assessment Puzzle



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Thank you for your attention. . . . .

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