

Avian Hazards at JAX



The usual suspects...



Avian Hazards at JAX

...and a few more



Step 1: System States

- Movement Areas
- Within the AOA
- Airport Property outside the AOA
- Off-Airport Property

Step 2: Hazards

- Geese
- Hogs
- Aerial Foragers
- Blackbirds
- Cattle Egrets
- Crows
- Coyotes
- Deer
- Dogs
- Doves
- Turkeys
- Gulls
- Mesomammals
- Songbirds
- Wading Birds
- Raptors
- Shorebirds
- Vultures

Example: Canada Geese

- Step 1: Identify System States
 - AOA
 - Airport property outside AOA
 - Off-airport property
- Step 2: Identify Hazards
 - Canada goose/geese struck by aircraft



Step 3: Identify your controls

- Engineering
 - Habitat reduction (no standing water)
 - Aquatic vegetation removal
 - Pyrotechnics/lethal control
- Warnings
 - Bird activity on ATIS
 - NOTAMS
- Administrative Procedures/Training
 - Daily wildlife inspections & reports
 - Annual wildlife hazard management training
 - Zoning recommendations for adjacent properties



Step 4: Determine Risk Factors

- Using JAA's Risk Matrix:
 - Residual Severity – Catastrophic (1)
 - Residual Likelihood – Extremely Remote (D)
 - **Residual Risk Total – 1D**



Step 5: Corrective Action and Implementation

- Within AOA: Eliminate/reduce open water sources within the AOA (Planning Dept & OPS)
- Airport property outside AOA: Eliminate/reduce open water sources/nesting habitat (Planning Dept. & OPS)
- Off-airport property: Public outreach & education; attend zoning meetings (Planning Dept.)



Step 6: Risk Management and Risk Reduction

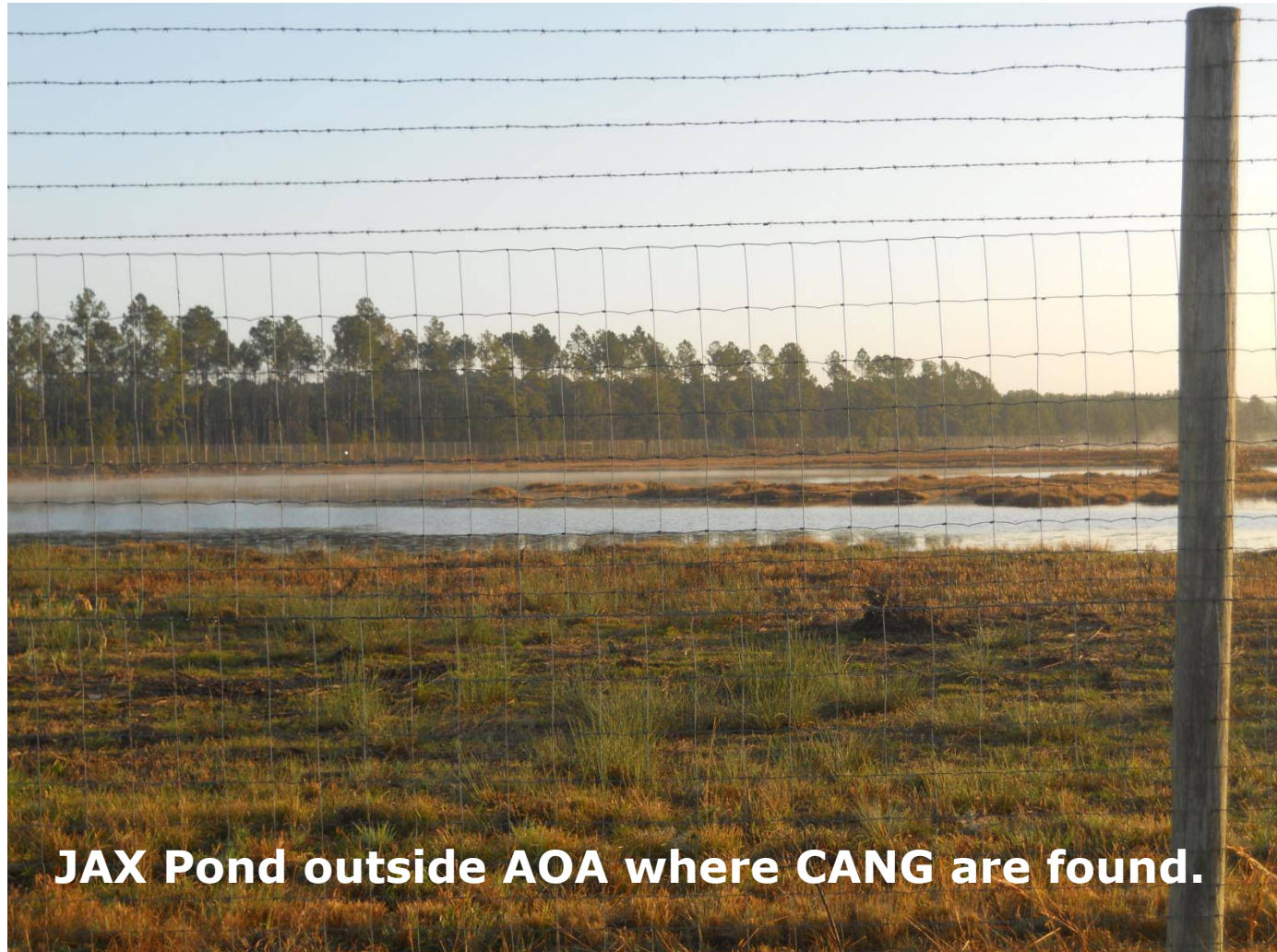
- Critical Control: Revised WHMP approved July 2011.
Eliminating/reducing all standing water from AOA is a goal of WHMP
- Critical Control Owner: Planning Environmental Coordinator
- Hierarchy/Defense in Depth Met?
Yes



Final Product

ID	Department	System Data/ Track/Activities	Hazard (What could go wrong)	Cause	Effect / Severity / Outcome (How Bad?)	Controls			Description of Controls	Residual Severity	Residual Likelihood	Residual Risk Total	Corrective Actions	Critical Control (Y/N) (If Yes, Critical Control is Categorized as Serious or if Residual Risk is High)	Residual Risk to Critical Control (if applicable, based on intervention)	Critical Control Owner (Y/N)	Control Category based on Control Action	Reporting/Review in Depth (If No, this will not include controls via O&M 3 Step 5)	Risk Reduction Target
						Elimination/Reduction	Control: Engineering	Control: Warning											
14	Operations, Planning, Wildlife Consultants, Facilities	AOA	Doves/Pigeons	feeding opportunities (building structures, low ground, available grass, short grass)	aircraft damage, damage reputation, operations interruption	X		X	chasing	Major	3	30	Remove all nesting/feeding opportunities from facility & adjacent areas, maintain 100mm stubble height of 8-12 bolts, eliminate bare areas and loose gravel	Facilities		Currently the wildlife plan is under revision, mitigation strategy will be based on BIAA. Target date is 5/2021.	Flawing Environmental Coordinator	Pending outcome of VMA	
15	Operations, Planning, JAAP, Wildlife Consultants, Facilities	AOA	Turkeys	disturbance by perimeter fence, wooded areas inside perimeter fence	mass casualties, aircraft damage, damage reputation, operations interruption	X		X	chasing, pyrotechnics, shooting	Hazardous	3	30	Use gun fence and gates use sensor (no brackets or GPS), eliminate all wooded areas including the perimeter fence	Facilities/Planning Ops	Y	Ops assesses habitat daily (Sr. Manager Operations). Work order system used to coordinate repair and track daily until completion under 133 category (Director of Facilities)	Flawing Environmental Coordinator	Pending outcome of VMA	Y
16	Operations, Planning, JAAP, Wildlife Consultants, Facilities	AOA	Gulls	low areas of standing water, open areas for feeding	mass casualties, aircraft damage, damage reputation, operations interruption	X	X	X	chasing, shooting, pyrotechnics	Hazardous	3	30	eliminate ponds to fill areas that collect water during heavy rain	Planning	Y	Currently the wildlife plan is under revision, mitigation strategy will be based on BIAA. Target date is 5/2021.	Flawing Environmental Coordinator	Pending outcome of VMA	Y
17	Operations, Planning, JAAP, Wildlife Consultants, Facilities	AOA	Black-necked stilts, roseate spoonbills, sandpeeps, herons, cormorants, bald eagles, ospreys	inhabited by perimeter fence, available water features, human waste, small mammals, cat food, insects, debris, vegetation/intruders inside the perimeter fence	aircraft damage, damage reputation, operations interruption	X		X	chasing, shooting, pyrotechnics, trapping, restraining	Major	3	30	eliminate fence breaches, bury perimeter fence, keep all trash contained, keep debris closed on all facilities, remove wooded areas from inside the perimeter fence	Facilities/Planning Ops	Y	Ops assesses habitat daily (Sr. Manager Operations). Work order system used to coordinate repair and track daily until completion under 133 category (Director of Facilities)	Sr. Manager of Operations, Environmental Planning Coordinator, Director of Facilities	Pending outcome of VMA	Y
18	Operations, Planning, Wildlife Consultants, Facilities	AOA	small, nesting songbirds, robins, meadowlarks, mockingbirds, sparrows, etc.	perching & nesting opportunities, nearby vegetation that produces seeds, fruits, nuts, etc., berries, short grass	aircraft damage, damage reputation, operations interruption	X		X	vegetation maintenance, pyrotechnics	Major	3	30	remove unnecessary perching structures from airfield, install perching deterrents on unreluctant structures (e.g. runway signs, etc), remove all food nests, nesting materials, & traps, keep facilities secured, maintain an 80mm stubble grass height of 6-12 inches, maintain a dense monoculture of grass, remove all weeds/vegetation that produces seeds, nuts, berries, and fruits	Facilities/Planning Ops/JAA PD	Y	Ops assesses habitat daily (Sr. Manager Operations). Work order system used to coordinate repair and track daily until completion under 133 category (Director of Facilities)	Sr. Manager of Operations, Environmental Planning Coordinator, Director of Facilities	Pending outcome of VMA	Y
19	Operations, JAAP, Planning, Wildlife Consultants, Facilities	AOA	Wading birds: Egrets, herons, ibis, terns	standing water, vegetation surrounding standing water, wetlands	mass casualties, aircraft damage, damage reputation, operations interruption	X		X	pyrotechnics, occasional wetland vegetation removal	Hazardous	3	30	regularly remove all wetland vegetation from in & around standing water, apply herbicide to wetland vegetation regularly, eliminate open areas of standing water, apply non-lethal chemicals to water that regularly allows ponds to fill, conduct use occasional lethal control to reinforce pyrotechnics	Facilities/Planning JAA PD	Y	Currently the wildlife plan is under revision, mitigation strategy will be based on BIAA. Target date is 5/2021.	Flawing Environmental Coordinator	Pending outcome of VMA	Y
20	Operations, JAAP, Planning, Wildlife Consultants, Facilities	AOA	Raptors: eagles, hawks, & kestrels	small mammals, perching & nesting opportunities	mass casualties, aircraft damage, damage reputation, operations interruption	X		X	pyrotechnics	Hazardous	3	30	keep perimeter fence free of vegetation, eliminate perching structures, install perching deterrents on unreluctant structures, remove unnecessary perching structures, remove all trash & sticks inside perimeter fence	Facilities	Y	Currently the wildlife plan is under revision, mitigation strategy will be based on BIAA. Target date is 5/2021.	Flawing Environmental Coordinator	Pending outcome of VMA	Y
21	Operations, JAAP, Planning, Wildlife Consultants, Facilities	JAA property outside AOA	Raptors: eagles, hawks, & kestrels	small mammals, perching & nesting opportunities	mass casualties, aircraft damage, damage reputation, operations interruption	X		X	Vegetation management	Hazardous	2	20	install perching deterrents on unreluctant structures, remove all traps (dead traps) from wooded areas, remove food/water nests (except Bird Egs), remove unnecessary perching structures, remove all trash & sticks	Facilities		Ops assesses habitat daily (Sr. Manager Operations). Work order system used to coordinate repair and track daily until completion under 133 category (Director of Facilities)	Sr. Manager of Operations, Environmental Planning Coordinator, Director of Facilities	Pending outcome of VMA	Y
22	Operations, Planning, Wildlife Consultants, Facilities	AOA	Shorebirds: plovers & bittern	areas of bare ground, low areas of temporary standing water, nesting opportunities	aircraft damage, damage reputation, operations interruption	X		X	chasing, pyrotechnics	Minor	4	20	Eliminate bare areas on AOA, remove any found nests, install perching deterrents on unreluctant structures, eliminate standing water during heavy rain events	Facilities/Planning		Ops assesses habitat daily (Sr. Manager Operations). Work order system used to coordinate repair and track daily until completion under 133 category (Director of Facilities)	Sr. Manager of Operations, Environmental Planning Coordinator, Director of Facilities	Pending outcome of VMA	Y
23	Operations, JAAP, Planning, Wildlife Consultants, Facilities	AOA	Ultraviv	debris, caution	mass casualties, aircraft damage, damage reputation, operations interruption	X	X	X	pyrotechnics	Catastrophic	1	10	reinforce pyrotechnics with lethal control; hang a dead raptor 200' up side down from a high pole on the AOA, remove and bury all caution immediately	Facilities/JAA PD Ops	Y	Currently the wildlife plan is under revision, mitigation strategy will be based on BIAA. Target date is 5/2021.	Flawing Environmental Coordinator	Pending outcome of VMA	Y
24	Operations, JAAP, Planning, Wildlife Consultants, Facilities	JAA property outside AOA	Ultraviv	debris, caution	mass casualties, aircraft damage, damage reputation, operations interruption	X	X	X	Vegetation management	Hazardous	2	20	reinforce pyrotechnics with lethal control; remove and bury all caution immediately	Facilities/JAA PD Ops		Currently the wildlife plan is under revision, mitigation strategy will be based on BIAA. Target date is 5/2021.	Flawing Environmental Coordinator	Pending outcome of VMA	Y

Questions?



JAX Pond outside AOA where CANG are found.