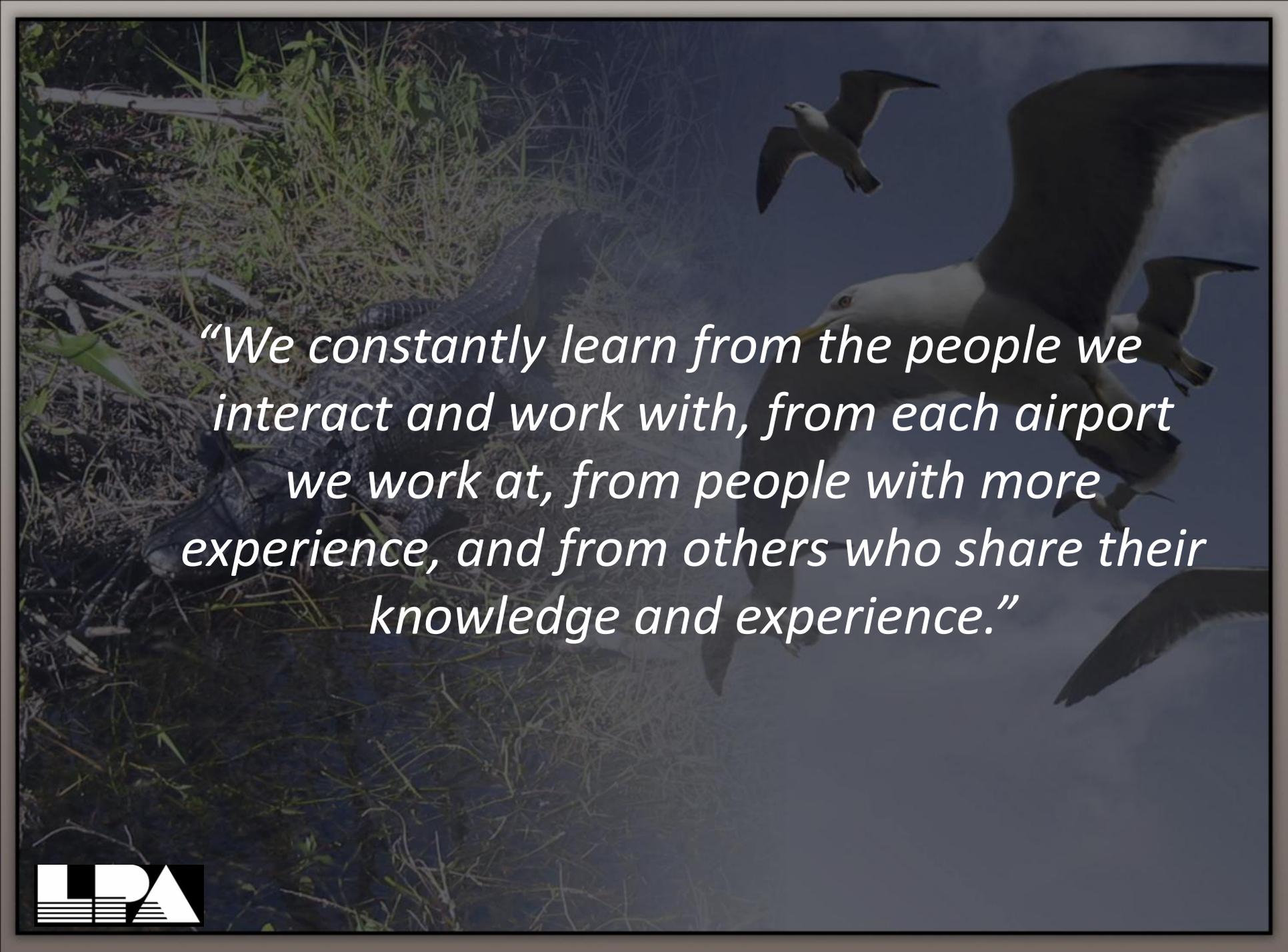




Wildlife Hazard Management at Airports: Lessons Learned

Mariben Espiritu Andersen
THE LPA GROUP INCORPORATED
A Unit of Michael Baker Corporation
Tel. 813.889.3892; Cell 813.240.8205
mandersen@mbakercorp.com





“We constantly learn from the people we interact and work with, from each airport we work at, from people with more experience, and from others who share their knowledge and experience.”



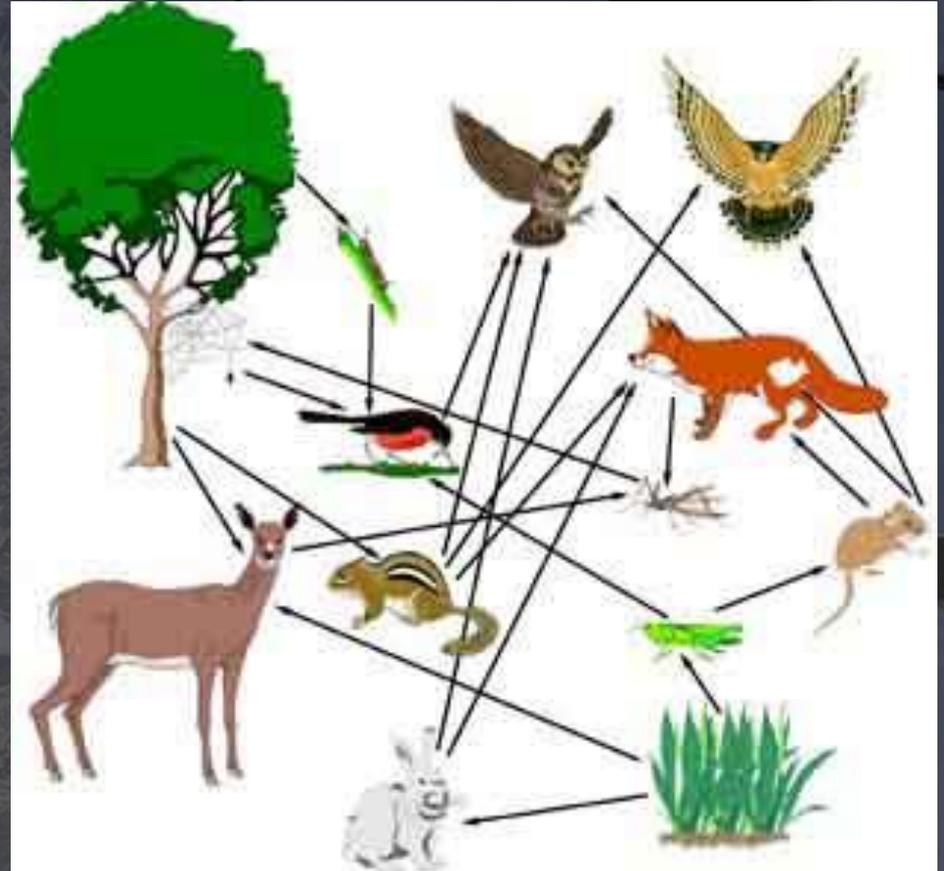
Each airport is unique!

- *Region*
- *Species*
- *Weather*
- *Environment*
- *Artificial structures*



Airport ecology is complex!

- *Balance prey-predator relationships*
- *Each animal has a niche*
- *Removing a predator gives another an edge to be dominant*



WHAs are necessary!

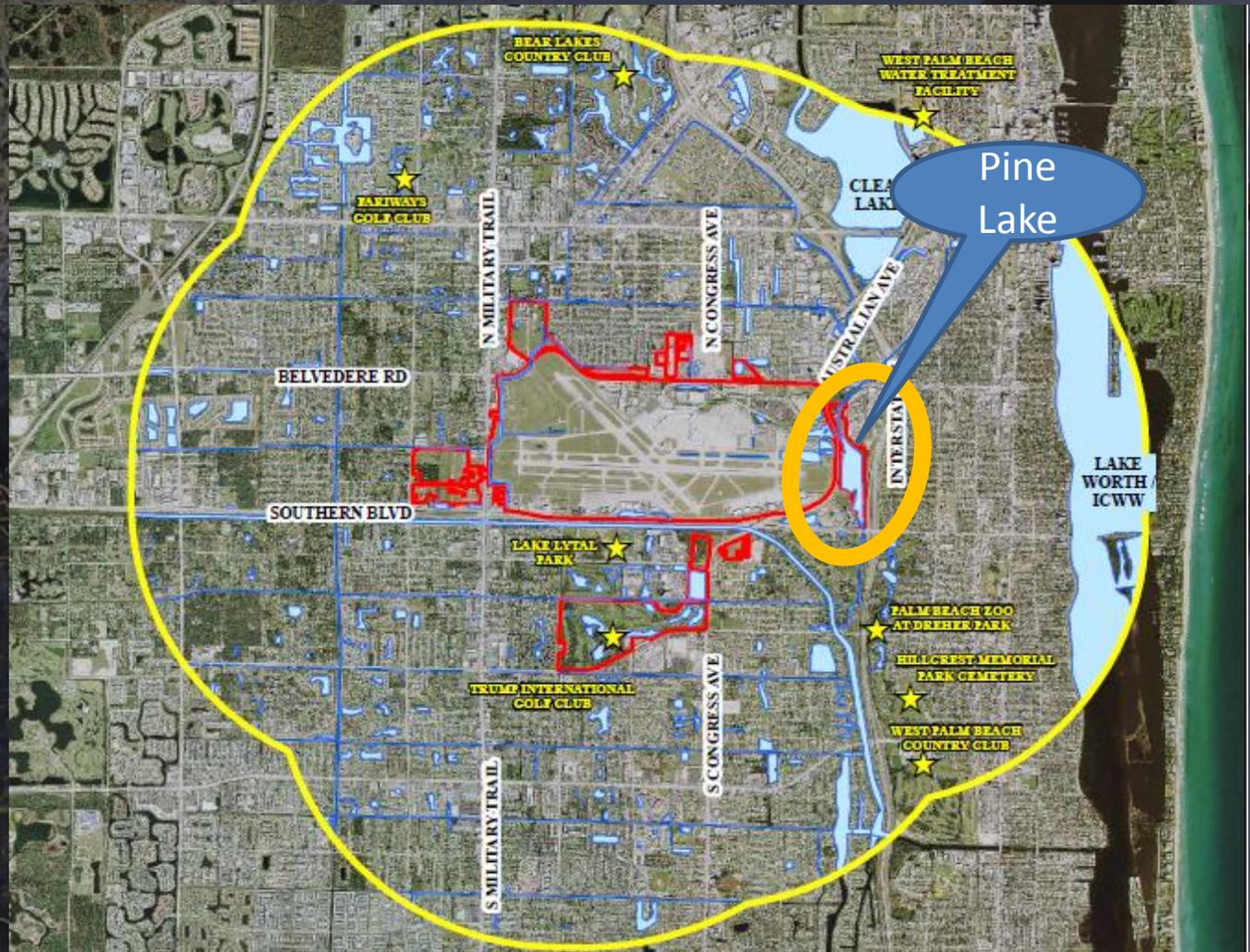
- *Seasonal variation*
- *Ongoing*
- *Updated periodically*
- *Conditions change*



WHM should go beyond airport property limits!

- *Good neighbor*
- *Development regulations on wetlands, stormwater, etc.*

Wildlife attractants outside airport property



Lake near Airport is haven for birds



Dangerous large flocks of birds

Starlings and
grackle flock
headed to
airport



Regulated wetland at golf course near airport

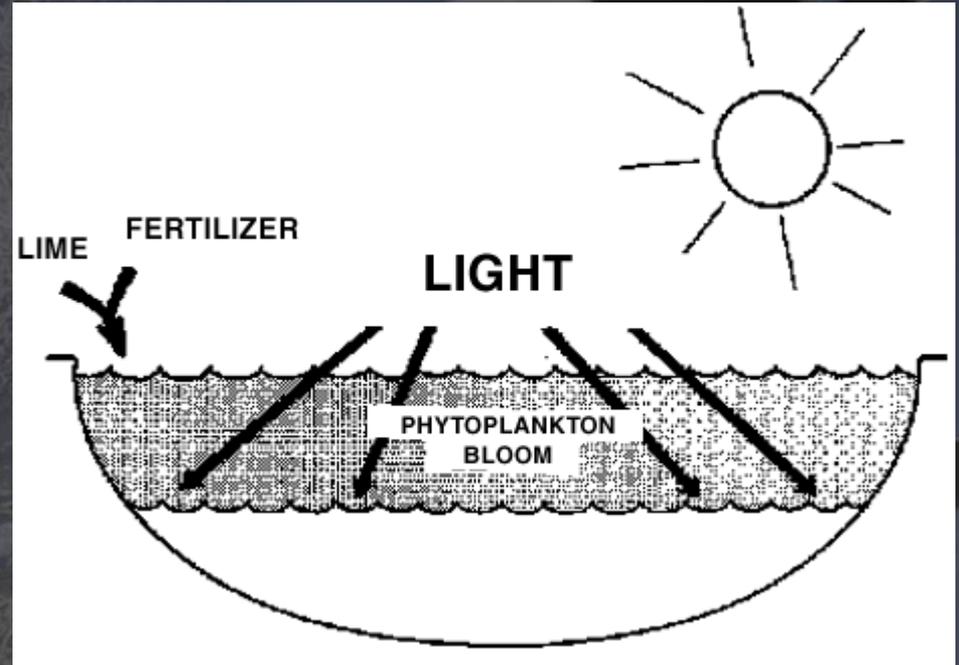


Regulated wetlands outside airport



Communication and coordination is critical!

- *Operations*
- *ATCT*
- *Landscape maintenance*
- *Aquatic maintenance*
- *Outside airport*



Natural controls cost less \$\$\$!



Each solution has limitations!

“Fencing works for specific species but not for all species.”

- *Most mammals*
- *Reptiles*
- *Consider maintenance cost*

Wildlife Fence



Typical Wildlife/Security Fence



Wildlife/Security Fence at a Swale



Drainage Wildlife/Security Fence



Sometimes doing nothing is the best solution!



Maintenance is key!



Unmaintained drainage structure



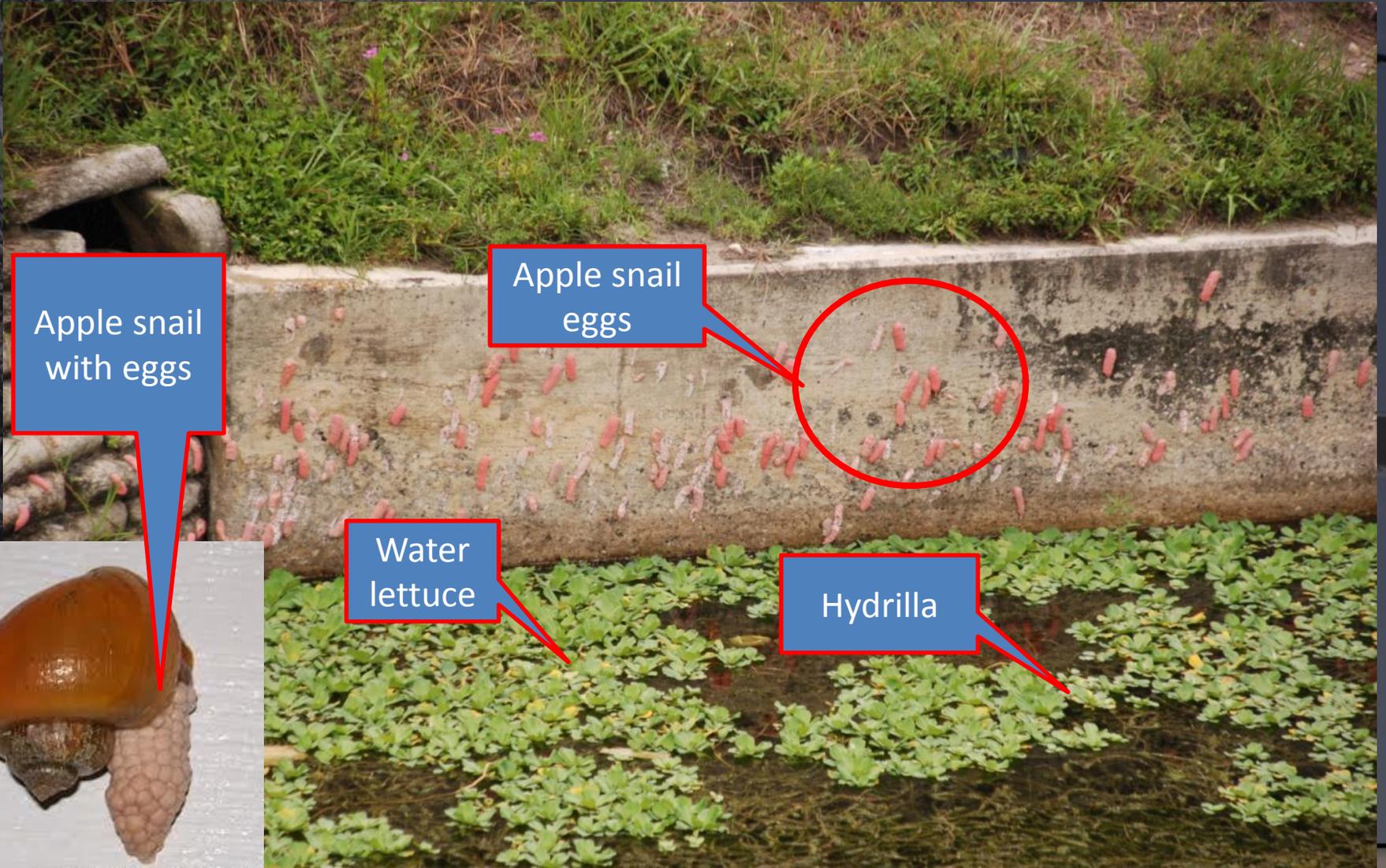
Cattails



Cattails



Waterbody aquatic weed management is essential!



Apple snail with eggs

Apple snail eggs

Water lettuce

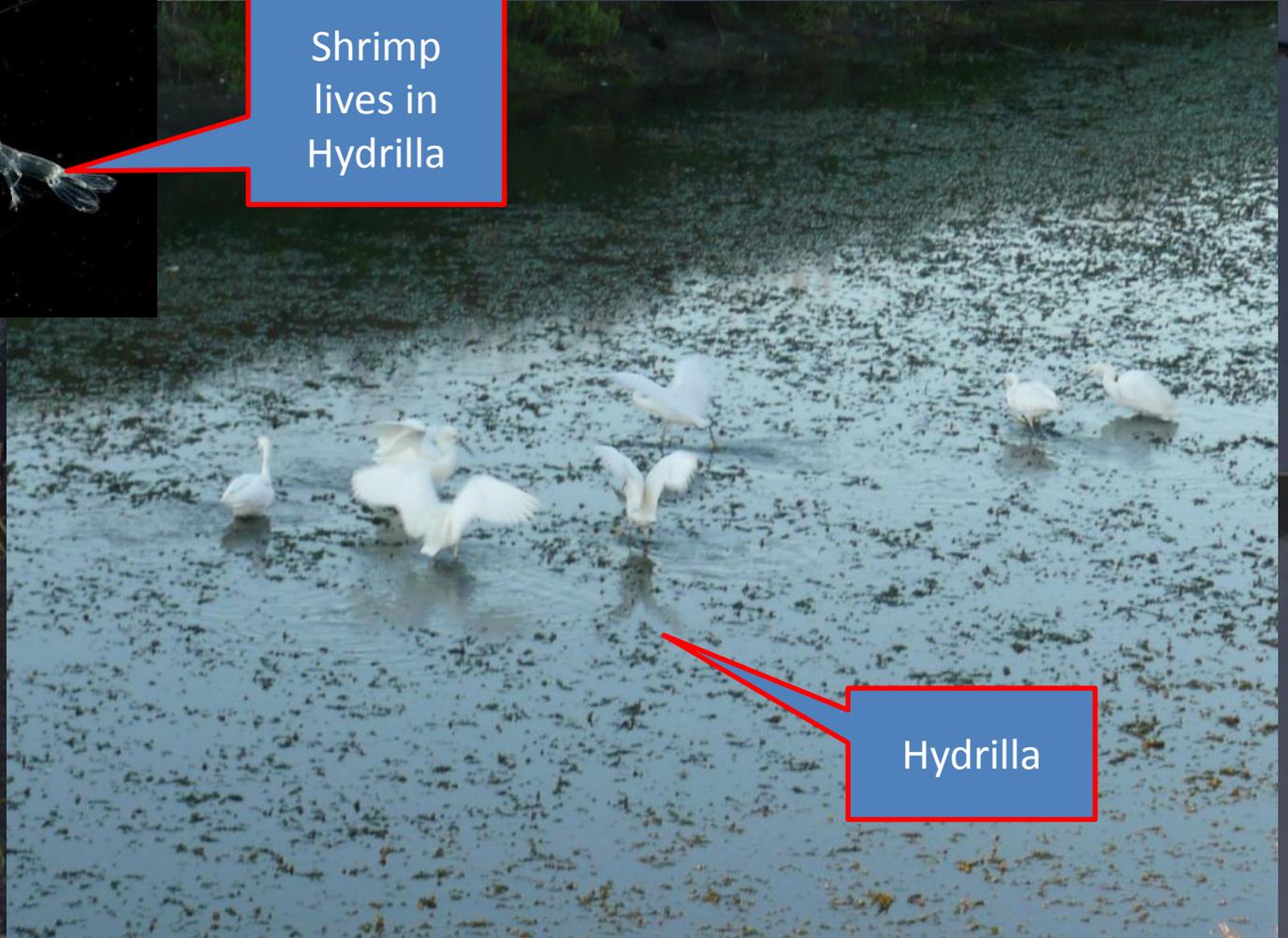
Hydrilla



Wading bird buffet!



Shrimp
lives in
Hydrilla



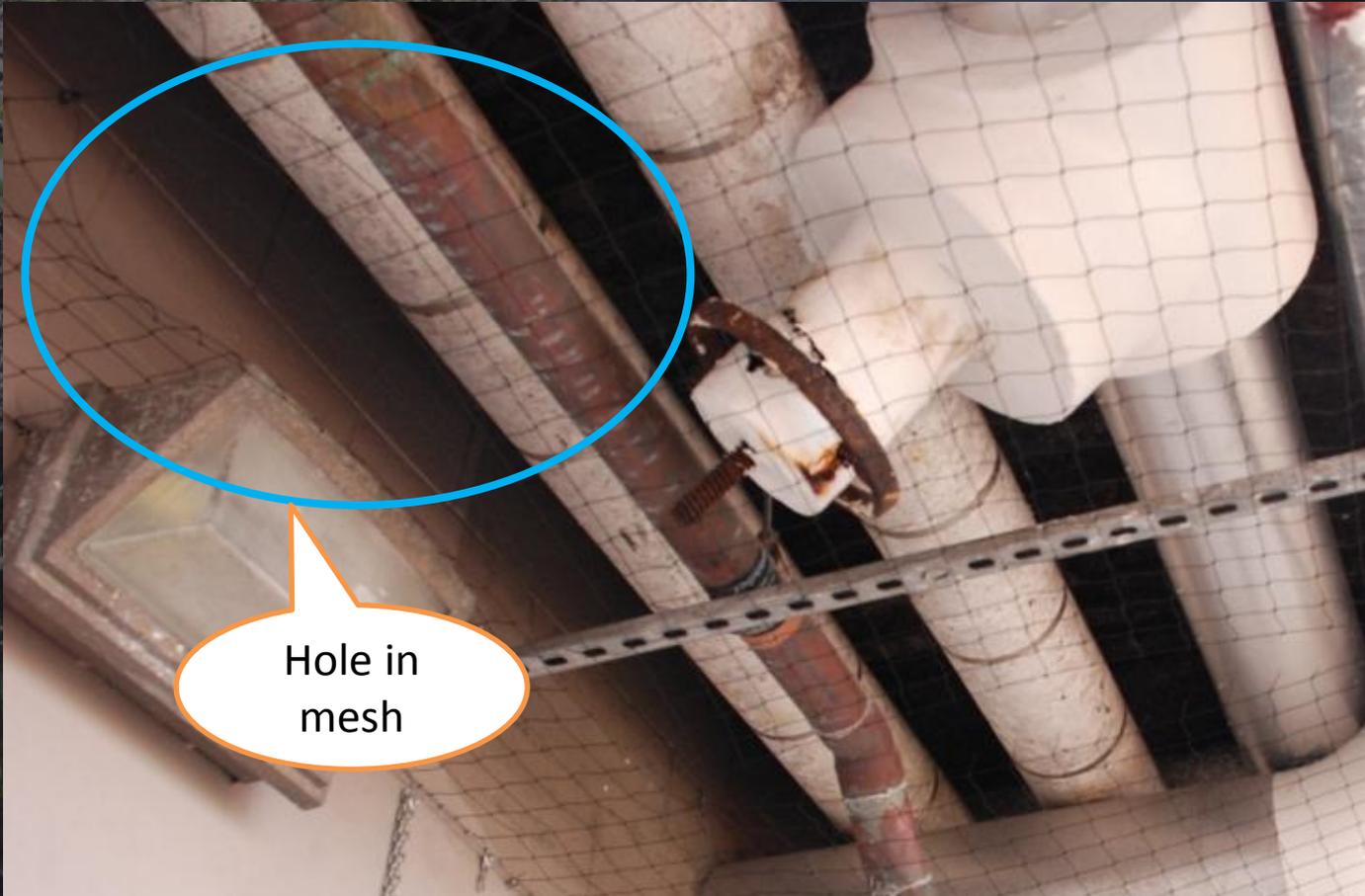
Hydrilla

Aquatic Weed Control

- *Aquatic herbicide*
- *Mechanical removal*
- *Grass carp*



Inspections are important!



Hole in
mesh

Know the Regulatory Requirements!

- *Wetland protection*
- *Animal protection*
- *Special permits*
- *Municipal ordinances*



Nuisance Species Control

- *Florida State Rule on WHMP*
- *Public hog hunting program*
- *Trapping*



Education is a good tool too!



WHMPs should be holistic!

- *Controls and measures*
- *Inspections*
- *Integrated Pest Management*
- *Waste management*
- *O and M*
- *Education and Training*



WHMPs should be holistic!

- *Incorporate WHMP into daily operational activities*
- *Document and record*
- *Plan-Do-Check-Act*
- *Living document*

WHM should be considered during the planning phase

- *Master Plan Update*
- *Project Design*
 - *Location*
 - *Landscaping*
 - *Stormwater treatment*

questions
anyone?

