Enhance it and they will come

Everglade Snail Kite utilization of habitat management areas on Lake Okeechobee

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MvFWC.com

Snail Kite nesting on Lake Okeechobee

- Critical habitat
- Nest location
 - Lake stage
 - Prey availability
 - Marsh vegetation

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Primary

Everglade Snail

Kite Range





Nesting season marsh characteristics

- Upper marsh dry
- Near-shore unstable
- Middle marsh hydrologically suitable

	12.5-13.5'	total	%	
2002-2015	122	436	27	
2015	38	77	49	
2016	169	245	69	
Littoral zone (acres)	26,000	150,000	17	

Snail Kite nesting - Lake Okeechobee





Middle marsh vegetation

- Nesting substrate dominated
 - ~60% = cattail, bulrush, Phragmites, willow, woody
 - ~35% = cattail
- Foraging habitat limited
 - ~6% = open water, spikerush, SAV





Lake Okeechobee habitat management

- Diverse objectives
- Various methods
- Large scale
- Wildlife utilization







Moonshine Bay

 Historically significant fish & wildlife assemblages









Moonshine Bay

 Historically significant fish & wildlife assemblages

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Moonshine Bay

• 1973-2012

- 8,100 acres spikerush lost
- 5,500 acres cattail expansion
- Loss of kite nesting





2012 Moonshin	e Bay vegetat	tion	
cattail	buttonbush	Open Water	
spikerush	Willow	Other	
water lily	bulrush 🗖	2015 Rx burn	
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Moonshine Bay habitat management

• Objective: \uparrow spikerush, \downarrow cattail

• Projects:

- 3,200 acres cattail herbicide treatment spring/summer 2015
- 6,500 acre prescribed burn November 2015
- Results: \uparrow open water, \downarrow cattail







Moonshine Bay Snail Kite nesting

- Rapid response to habitat management
- Nesting follows vegetation response







Moonshine Bay Snail Kite nesting

Record breaking

MvFWC.com

- Total nests: M. Bay 161, Lake O. 70
- Successful nests: M. Bay 101 (63%), Lake O. – 22 (31%)
- Concentrated near untreated veg



Snail Kite 2016 nesting season



Conclusion

- Habitat management can benefit kite nesting
- Increased moderate lake level foraging habitat
- Historic conditions to identify management areas
- Basic snail information needed





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- Avian Research and Conservation Institute
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