THE LARGEST NESTING YEAR FOR WADING BIRDS SINCE 1934, AND ITS IMPLICATIONS FOR EVERGLADES RESTORATION.

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Alley North Colony

Southwest Jumbo Jet

Hard Rock Stadium

Homestead - Miami Speedway

1 km
Alley North Colony March 2018 – video by Mark Cook,
South Florida Water Management District
56,000 Ibis nests!
2018 Colonies

Legend
Colony Species Composition
Sum of Fields

- 2,300
- GREG
- SMWH
- WHIB
- SNEG
- WOST
Numbers of nesting pairs
all species

122k nests total in 2018

Counts of nests in mainland ENP, WCAs
2018 nest numbers as a multiple of ten-year mean

- Wood Storks: 3%
- White Ibises: 78%
- Great Egrets: 12%
- small herons
Fledglings per successful nest

<table>
<thead>
<tr>
<th>Year</th>
<th>Great Egrets</th>
<th>White Ibis</th>
<th>Wood Storks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.5</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>2014</td>
<td>1.7</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2015</td>
<td>1.9</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>2016</td>
<td>2.1</td>
<td>0.7</td>
<td>1.4</td>
</tr>
<tr>
<td>2017</td>
<td>2.3</td>
<td>0.8</td>
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</tbody>
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**Total Fledglings**

- **Wood Storks**: 6,317
- **White Ibises**: 80,029
- **Great Egrets**: 26,783
Strong drying, low water levels in spring 2017

Rapid, early wetting in summer 2017

Exceptionally long growing season

Fast, uninterrupted drying in 2018
Unusually high stages in 2018
Persistent flooding of high elevation marshes

Crayfish do well in recently flooded areas

Recently re-flooded, very short hydroperiod

1-3 years since re-flooded, intermediate hydroperiod

>3 years since re-flooded, long hydroperiod

Dorn N. and M.I. Cook. Ecology 96:2984-2993

Graphic courtesy Joel Trexler, FIU
Data provided by Joel Trexler, FIU.
CEPP should increase hydroperiod in higher elevation marshes.
Locations of 1 adult stork tagged in the Everglades
Why was 2018 important?

- 2018 mimicked many hydrological features of a restored Everglades

- Responses of aquatic prey and birds were consistent with our predictions

- The modern, smaller Everglades still has the capacity to support historically-sized bird nesting events

- Reduced uncertainty about the response of this system to restored hydrology.
It takes a whole century....
"It is, of course, quite impossible to describe it. There are no words or certainly none in my power to give the impression of an observer in the midst of that feathered metropolis. It was as if humanity had ceased to exist, and that we were intruders in a world which was peopled entirely by birds, birds which ruled the country and which regarded us as interlopers to be ejected as soon as possible!"

Alexander Sprunt Jr. 1942