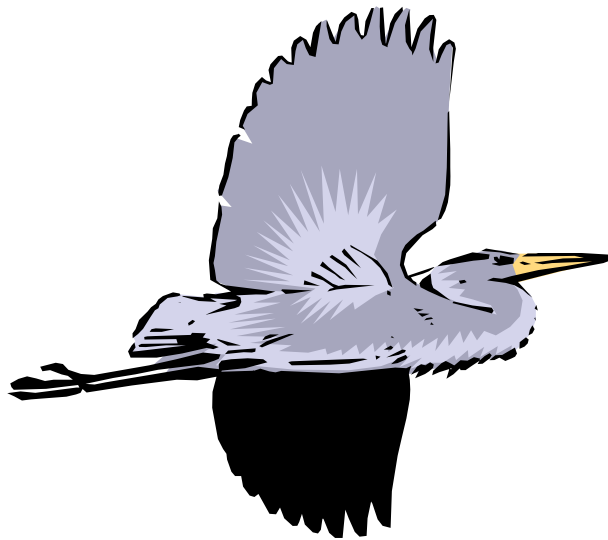


# **MAST ACADEMY OUTREACH**

## **MIDDLE SCHOOL PROGRAM**

### **Birds of the Everglades**

#### **On-site Package**



**MAST Academy**

**Maritime and Science Technology High School**

**Miami-Dade County Public Schools**

**Miami, Florida**

# **BIRDS OF THE EVERGLADES**

## **ON-SITE PACKAGE**

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## Student Instructions



1. Use the field notes sheets in this packet to record field notes for each of the birds you see while exploring Royal Palm Hammock. Ask for additional field note sheets from the MAST Outreach instructor if you need them.

2. You will be given a Field Guide to help with identification. Use the Bird Checklist to check off each bird you identify.

### LOCAL BIRDS of South Florida



3. Binoculars will help you to see the field marks needed to identify the birds. Make sure your binoculars are always ready for use by keeping them around your neck while you are on the trail.

4. Let the instructor know if you see a bird that hasn't been seen yet. Stay with the group to ensure that you don't miss any sighting. Remember that being quiet while on the trail will allow everyone to observe a bird before it flies away.



5. Other wildlife, such as mammals or reptiles, will almost certainly be seen while on the trail. **KEEP YOUR DISTANCE!** Use the enclosed sheet to help you identify these creatures.

6. It gets hot out here! Make sure you wear headgear, sunscreen, and carry water with you while on the trail. Be sure to apply insect repellent before you hit the trail.



**LET'S HAVE FUN, AND ENJOY THE BEAUTY OF  
EVERGLADES NATIONAL PARK!**

## Introduction

Everglades National Park was established in 1947 to protect the rich resources of South Florida's subtropical wilderness wetlands, particularly the diverse and abundant birdlife. Birds have always been one of the park's principal activities for park visitors.

This page provides a complete list of the birds known from the park, 347 species as of 1 June 1984, along with a key indicating the abundance and seasonal occurrence of each species. It follows earlier

checklist compiled by William B. Robertson, Jr., Willard E. Dilley, John C. Ogden and R. L. Cunningham and reflects the continuing growth of information about the birds of the Park. As noted in the list, many birds are known in Everglades National Park from only a few records. Users of this checklist can contribute to updating future lists by carefully recording details of their observations of less common species and reporting the information to park personnel.

### Key

B	Breeding status
Sp	Spring (March 1 - May 31)
Su	Summer (June 1 - July 31)
F	Fall (August 1 - November 15)
W	Winter (November 16 - February 28)
c	Commonly observed
u	Uncommonly observed
r	rarely observed
*	Fewer than 10 records
+	Breeding
?	Breeding status unknown

## Birds

	B	Sp	Su	F	W
Red-throated Loon					*
Common Loon				r	r
Pied-billed Grebe	+		u	c	c
Horned Grebe				c	c
Red-necked Grebe					*
Sooty Shearwater				*	
Wilson's Storm-Petrel				*	
Brown Booby				*	*
Northern Gannet			c	r	c
American White Pelican	+		c	c	c
Brown Pelican					*
Great Cormorant					
Double-crested Cormorant	+	c	c	c	c
Aukinga	+	c	u	c	c
Magnificent Frigatebird		u	u	u	u
American Bittern	?	u	r	u	c
Least Bittern	+	u	c	u	u
Great Blue Heron	+	c	c	c	c
Great Egret	+	c	c	c	c
Snowy Egret	+	c	c	c	c
Little Blue Heron	+	c	c	c	c
Tricolored Heron	+	c	c	c	c

[illegible]



Transcribed by Kelli Bacher. Artwork by Shirley Beccue.



## Other Wildlife Seen in South Florida

### Mammals

\_\_\_ Raccoon



\_\_\_ River Otter



\_\_\_ Opossum



\_\_\_ Marsh Rabbit



\_\_\_ Gray Squirrel



\_\_\_ White-tailed Deer



### Reptiles

\_\_\_ American Alligator



\_\_\_ Florida Redbelly Turtle



\_\_\_ Florida Softshell



\_\_\_ Florida Water Snake



\_\_\_ Florida Cottonmouth









\_\_\_ Eastern Indigo















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**Step 3: Shape/Color of Bill**  
(circle one)

Color of bill	
	
Wide, flat	Short, thin, pointed
	
Long, thin	Sharp, chisel-like
	
Short, hooked	Long, spoon-like

In the Air	In Trees				In the Water
   	 	 	 		
Straight flight	Bouncing flight	Gliding flight	Hovering flight		
Walks	Hops	Climbs up tree trunk or branches	Climbs down trunk or branches		
				Wades	
				Swims	

**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)

**Step 10: Markings on the Breast (circle all that apply)**

### Step 11: Markings on the Rump (circle one)

of legs \_\_\_\_\_

**Step 13: Markings on the Tail**  
(circle all that apply)

**Step 14: Basic Bird Group**  
(circle one)









### **Step 15: Draw the Bird**











Name of Bird \_\_\_\_\_



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**Step 3: Shape/Color of Bill**  
(circle one)

Color of bill	
	
Wide, flat	Long, thin
	
Short, thin, pointed	Sharp, stout
	
Short, thick	Sharp, chisel-like
	
Short, hooked	Long, spoon-like

In the Air	In Trees				In the Water
   	 	 	 		
Straight flight	Bouncing flight	Gliding flight	Hovering flight		
Walks	Hops	Climbs up tree trunk or branches	Climbs down trunk or branches		
				Wades	
				Swims	

**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)

**Step 10: Markings on the Breast (circle all that apply)**

### **Step 11: Markings on the Rump (circle one)**

of legs \_\_\_\_\_

**Step 13: Markings on the Tail**  
(circle all that apply)

**Step 14: Basic Bird Group**  
(circle one)

### Step 15: Draw the Bird

Other	Forted
W	

## Other

of Prev

Name of Bird.



## BIRDWATCHING FIELD NOTES

**Step 1: Bird's Location/Patterns in Behavior**  
(circle all that apply)

### PATTERNS IN BEHAVIOR

In the Air

Straight flight

Bounding flight

Gliding flight

Hovering flight

On the Ground

Walks

Hops

In Trees

Climbs up tree trunks or branches

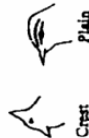
Climbs down tree trunks or branches

In the Water

Wades

Swims

**Step 4: Shape of Top of Head** (circle one)



Crest

Plain

**Step 8: Shape/Color of Legs** (circle one)

Color of legs \_\_\_\_\_



Short



Long

**Step 12: Tail Shape** (circle one)



Rounded



Pointed



Notched



Forked



End



Edges



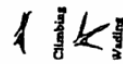
Sides

Other \_\_\_\_\_

**Step 13: Markings on the Tail** (circle all that apply)



Bar



Spot



Stripe



Band



Patch

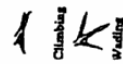


Plain

**Step 9: Feet Shape** (circle one)



Bar



Spot



Stripe



Band



Patch



Plain

Other \_\_\_\_\_

**Step 5: Markings on the Face** (circle all that apply)



Eye stripes



Eye rings



Plain

Other \_\_\_\_\_

**Step 6: Wing Shape** (circle one)



Long, thin



Short, wide



Long, wide

Other \_\_\_\_\_

**Step 7: Patterns on the Wings** (circle all that apply)



Wing patches



Wing bar

Other \_\_\_\_\_

**Step 11: Markings on the Rump** (circle one)



Patch



Plain

**Step 15: Draw the Bird**

Name of Bird \_\_\_\_\_

**Step 14: Basic Bird Group** (circle one)



Land Bird











Water Bird












Bird of Prey

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**Step 3: Shape/Color of Bill**  
(circle one)







Color of bill					
					
Wide, flat	Short, thin, pointed	Short, thick	Short, hooked		
					
Long, thin	Short, stout	Sharp, chisel-like	Long, spear-like		
				Other	

In the Air	   	Straight flight Bouncing flight Gliding flight Hovering flight
On the Ground	  	Walks Hops In Trees
In the Water	 	Wades Swims





**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)

### **Step 11: Markings on the Rump (circle one)**

	Swimming		Catching prey
	Climbing		Wading
	Scratching		Perching
	Other		

**Step 14: Basic Bird Group**  
(circle one)

Other	Notched	Pointed	Rounded
			
Forced	Severed		

**Other**

 **End**

 **Edges**









 **Sides**











	Land Bird	Water Bird	Bird of Prey
1. <i>Agelaius</i>	100	100	100
2. <i>Agelaius</i>	100	100	100
3. <i>Agelaius</i>	100	100	100
4. <i>Agelaius</i>	100	100	100
5. <i>Agelaius</i>	100	100	100
6. <i>Agelaius</i>	100	100	100
7. <i>Agelaius</i>	100	100	100
8. <i>Agelaius</i>	100	100	100
9. <i>Agelaius</i>	100	100	100
10. <i>Agelaius</i>	100	100	100
11. <i>Agelaius</i>	100	100	100
12. <i>Agelaius</i>	100	100	100
13. <i>Agelaius</i>	100	100	100
14. <i>Agelaius</i>	100	100	100
15. <i>Agelaius</i>	100	100	100
16. <i>Agelaius</i>	100	100	100
17. <i>Agelaius</i>	100	100	100
18. <i>Agelaius</i>	100	100	100
19. <i>Agelaius</i>	100	100	100
20. <i>Agelaius</i>	100	100	100
21. <i>Agelaius</i>	100	100	100
22. <i>Agelaius</i>	100	100	100
23. <i>Agelaius</i>	100	100	100
24. <i>Agelaius</i>	100	100	100
25. <i>Agelaius</i>	100	100	100
26. <i>Agelaius</i>	100	100	100
27. <i>Agelaius</i>	100	100	100
28. <i>Agelaius</i>	100	100	100
29. <i>Agelaius</i>	100	100	100
30. <i>Agelaius</i>	100	100	100
31. <i>Agelaius</i>	100	100	100
32. <i>Agelaius</i>	100	100	100
33. <i>Agelaius</i>	100	100	100
34. <i>Agelaius</i>	100	100	100
35. <i>Agelaius</i>	100	100	100
36. <i>Agelaius</i>	100	100	100
37. <i>Agelaius</i>	100	100	100
38. <i>Agelaius</i>	100	100	100
39. <i>Agelaius</i>	100	100	100
40. <i>Agelaius</i>	100	100	100
41. <i>Agelaius</i>	100	100	100
42. <i>Agelaius</i>	100	100	100
43. <i>Agelaius</i>	100	100	100
44. <i>Agelaius</i>	100	100	100
45. <i>Agelaius</i>	100	100	100
46. <i>Agelaius</i>	100	100	100
47. <i>Agelaius</i>	100	100	100
48. <i>Agelaius</i>	100	100	100
49. <i>Agelaius</i>	100	100	100
50. <i>Agelaius</i>	100	100	100
51. <i>Agelaius</i>	100	100	100
52. <i>Agelaius</i>	100	100	100
53. <i>Agelaius</i>	100	100	100
54. <i>Agelaius</i>	100	100	100
55. <i>Agelaius</i>	100	100	100
56. <i>Agelaius</i>	100	100	100
57. <i>Agelaius</i>	100	100	100
58. <i>Agelaius</i>	100	100	100
59. <i>Agelaius</i>	100	100	100
60. <i>Agelaius</i>	100	100	100
61. <i>Agelaius</i>	100	100	100
62. <i>Agelaius</i>	100	100	100
63. <i>Agelaius</i>	100	100	100
64. <i>Agelaius</i>	100	100	100
65. <i>Agelaius</i>	100	100	100
66. <i>Agelaius</i>	100	100	100
67. <i>Agelaius</i>	100	100	100
68. <i>Agelaius</i>	100	100	100
69. <i>Agelaius</i>	100	100	100
70. <i>Agelaius</i>	100	100	100
71. <i>Agelaius</i>	100	100	100
72. <i>Agelaius</i>	100	100	100
73. <i>Agelaius</i>	100	100	100
74. <i>Agelaius</i>	100	100	100
75. <i>Agelaius</i>	100	100	100
76. <i>Agelaius</i>	100	100	100
77. <i>Agelaius</i>	100	100	100
78. <i>Agelaius</i>	100	100	100
79. <i>Agelaius</i>	100	100	100
80. <i>Agelaius</i>			

Name of Bird \_\_\_\_\_

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**Step 3: Shape/Color of Bill**  
(circle one)

Color of bill	
	
Wide, flat	Long, thin
	
Short, thin, pointed	Sharp, stout
	
Short, thick	Sharp, chisel-like
	
Short, hooked	Long, spoon-like

In the Air	In Trees				In the Water				
   	 	 	 						
Straight flight	Bouncing flight	Gliding flight	Hovering flight	Walks	Hops	Climbs up tree trunk or branches	Climbs down trunk or branches	Wades	Swims

**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)

	<b>Eye rings</b>
	<b>Eye stripes</b>

Long, thin

Short, wide

Long, wide



Wing Bar

**Step 9: Feet Shape**  
(circle one)

**Step 10: Markings on the Breast (circle all that apply)**

### Step 11: Markings on





of legs \_\_\_\_\_

The diagram illustrates two types of fish markings. On the left, a fish is shown with vertical dark bands, labeled 'Bars'. On the right, a fish is shown with dark spots, labeled 'Spots'.

**Step 13: Markings on the Tail**  
(circle all that apply)

**Step 14: Basic Bird Group**  
(circle one)

### **Step 15: Draw the Bird**

	Notched		Forked
	Serrated		Other









End Edges Sides

	Land Bird	Water Bird	Bird of Prey
1			
2			
3			
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100			

Name of Bird \_\_\_\_\_

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**Step 3: Shape/Color of Bill**  
(circle one)

Color of bill _____	
	Wide, flat
	Short, thin, pointed
	Short, stout
	Long, thin
	Short, thick
	Short, hooked
	Sharp, chisel-like
	Long, spear-like
Other _____	

**Step 7: Patterns on the Wings**  
(circle all that apply)

### Step 11: Markings on the Rump (circle one)









### **Step 15: Draw the Bird**











	Land Bird	Water Bird	Bird of Prey
1			

Name of Bird

۱۰۰

**Step 3: Shape/Color of Bill**  
(circle one)

Color of bill	
	Wide, flat
	Short, thin, pointed
	Short, thick
	Short, hooked
	Long, thin
	Short, stout
	Sharp, chisel-like
	Long, spoon-like










In the Air	   	Straight flight Bouncing flight Oilding flight Hovering flight	
On the Ground	 	Walks Hops	
In the Water	 	Wades Swims	
	In Trees	 	Climbs up tree Climbs down tree

**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)

**Step 10: Markings on the Breast (circle all that apply)**







### Step 11: Markings on the Rump (circle one)

of legs _____			
			
			

**Step 13: Markings on the Tail**  
(circle all that apply)

**Step 14: Basic Bird Group**  
(circle one)

### **Step 15: Draw the Bird**

	Rounded
	Pointed
	Notched
	Serrated
	Other
	Forked

### Other









Side  
Edge  
End










	Land Bird	Water Bird	Bird of Prey
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Name of Bird.

۱۰۰

**Step 3: Shape/Color of Bill**  
(circle one)





Color of bill	
	
Wide, flat	Short, thin, pointed
	
Long, thin	Short, thick
	
Short, stout	Sharp, chisel-like
	
Short, hooked	Long, rousel-like


In the Air	   	Straight flight Bouncing flight Gliding flight Hovering flight
On the Ground	  	Walks Hops In Trees
In the Water	 	Wades Swims

Plain

Crest




Color of legs \_\_\_\_\_

Other	Notched	Pointed	Rounded
			
Forced	Severed		

	<b>Eye stripes</b>
	<b>Eye rings</b>

	Swimming		Climbing		Wading		Spearfishing		Other
	Catching fish		Climbing		Wading		Spearfishing		Other

**Other**

-  **End**
-  **Edges**
-  **Sides**

Long, wide

Short, wide

Long, thin

The diagram shows two caterpillar segments. The top segment is labeled 'Bare' and has a simple outline with a few internal lines. The bottom segment is labeled 'Spots' and has a similar outline but with several small, dark, oval spots along its side.

Land Bird      Water Bird      Bird of Prey











Wing patches  
Wing Bars

Name of Bird\_\_\_\_\_

100

**Step 3: Shape/Color of Bill**  
(circle one)

Color of bill	
	
Wide, flat	Short, thin, pointed
	
Long, thin	Short, thick
	
Short, stout	Sharp, chisel-like
	
Short, hooked	Long, rousel-like

In the Air	Straight flight	Bouncing flight	Gliding flight	Hovering flight
On the Ground	Walks	Hops	In Trees	
In the Water	Wades	Swims		

**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)

Long, wide

Short, wide

Long, thin

**Step 10: Markings on the Breast (circle all that apply)**

Color of legs



Swimming	Swimming	Swimming
Climbing	Climbing	Climbing
Wading	Wading	Wading
Scratching	Scratching	Scratching
Piercing	Piercing	Piercing


The diagram illustrates two types of caterpillar markings. On the left, a 'Bar' is shown as a horizontal, slightly curved line with a small hook-like projection at its right end. On the right, a 'Spot' is shown as a horizontal, slightly curved line with a small, irregular, blotchy shape at its right end.


**Step 13: Markings on the Tail**  
(circle all that apply)

**Step 14: Basic Bird Group**  
(circle one)

### Step 15: Draw the Bird

Neighborhood	Other
	

 Rounded

 Pointed

	Sides
	Edges
	End









	Land Bird	Water Bird	Bird of Prey
1			
2			
3			
4			
5			
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50			










Name of Bird.



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**Step 3: Shape/Color of Bill**  
(circle one)









Color of bill	
	
Wide, flat	Long, thin
	
Short, thin, pointed	Short, stout
	
Short, thick	Sharp, chisel-like
	
Short, hooked	Long, rousel-like

In the Air	   	Straight flight Bouncing flight Gliding flight Hovering flight
On the Ground	  	Walks Hops Climbs up tree trunks or branches
In the Water	 	Wades Swims

**Step 5: Markings on the Face**  
(circle all that apply)

**Step 7: Patterns on the Wings**  
(circle all that apply)





### Step 11: Markings on the Rump (circle one)

of legs _____	Short	Long
		
Scratching	Probing	
		
Climbing	Wading	
		
Swimming	Climbing prey	
		

**Step 13: Markings on the Tail**  
(circle all that apply)

**Step 14: Basic Bird Group**  
(circle one)

### Step 15: Draw the Bird

	Neighborhood		
	Other		
	Reserve		
	Forked		

End Edges Sides

Bird of Prey

Waterfowl

Land Bird

Name of Bird\_\_\_\_\_

The School Board of Miami-Dade County, Florida, adheres to a policy of nondiscrimination in employment and educational programs/activities and strives affirmatively to provide equal opportunity for all as required by:

**Title VI of the Civil Rights Act of 1964** - prohibits discrimination on the basis of race, color, religion, or national origin.

**Title VII of the Civil Rights Act of 1964**, as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

**Title IX of the Education Amendments of 1972** - prohibits discrimination on the basis of gender.

**Age Discrimination in Employment Act of 1967 (ADEA)**, as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

**The Equal Pay Act of 1963**, as amended - prohibits sex discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

**Section 504 of the Rehabilitation Act of 1973** - prohibits discrimination against the disabled.

**Americans with Disabilities Act of 1990 (ADA)** - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations, and telecommunications.

**The Family and Medical Leave Act of 1993 (FMLA)** - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

**The Pregnancy Discrimination Act of 1978** - prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

**Florida Educational Equity Act (FEEA)** - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

**Florida Civil Rights Act of 1992** - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

**School Board Rules 6Gx13- 4A-1.01, 6Gx13- 4A-1.32, and 6Gx13- 5D-1.10** - prohibit harassment and/or discrimination against a student or employee on the basis of gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual orientation, social and family background, linguistic preference, pregnancy, or disability.

*Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.*

REVISED 8/1/01