#### Coyotes (Canis latrans) in Florida



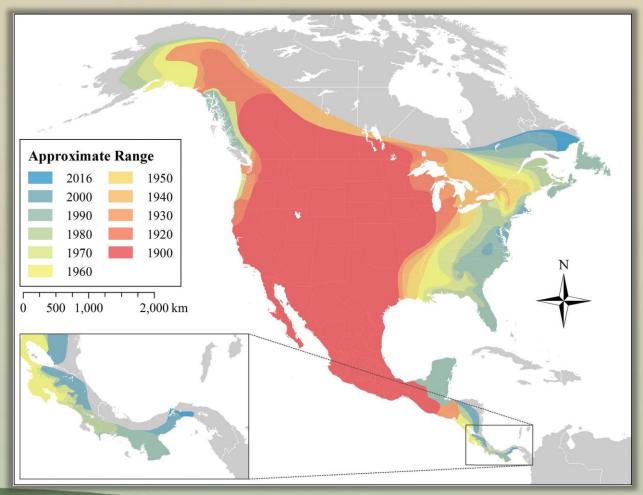
Presented by:
Heather LeBlanc
FL Fish and Wildlife
Conservation Commission



Photo courtesy of Robert Steagall-Sanibel Island



# History of the migration of coyotes across North and Central America





Hody & Kays. 2018

# Coyote range expansioneradication of wolves



Red wolf; photo curtsey of B. McPhee



Gray wolf; photo curtsey of USFWS



# Coyote range expansion-Conversion to an agricultural landscape



FWC photo- Polk City



FWC photo- Sebring



## History of the migration of coyotes in Florida



Brady & Campbell. 1983

Wooding & Hardisky. 1990

Scent Survey Data. 1997-99 (M. Main)

Carcass Data (M. Main)

Personal Communication

 Greene & Gore. 2013 (Furthest southern observation- Key Largo, 2011)



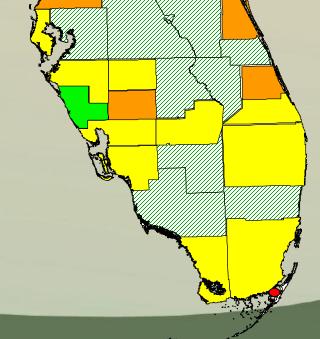






Photo courtesy of Carolyn Beisner- Lake Worth Lagoon

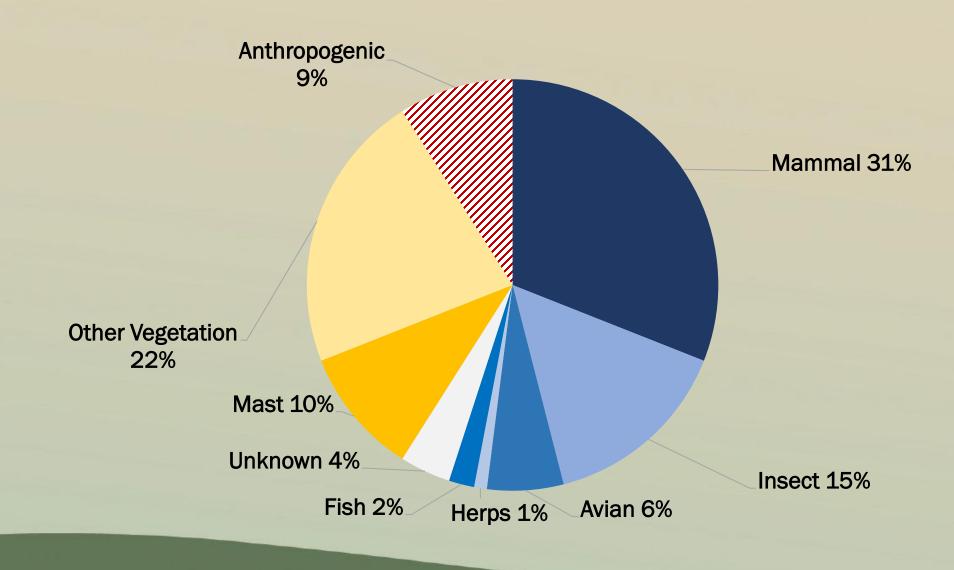
### Coyote biology

- Omnivorous, highly adaptable
- Adults 25-40 lbs.
- Home range size:
   natural areas ~15 mi<sup>2</sup>,
   urban areas ~3 mi<sup>2</sup>
- Mate in Winter
- Pups in Spring
- Litter size ~6 pups
- Both parents care for young



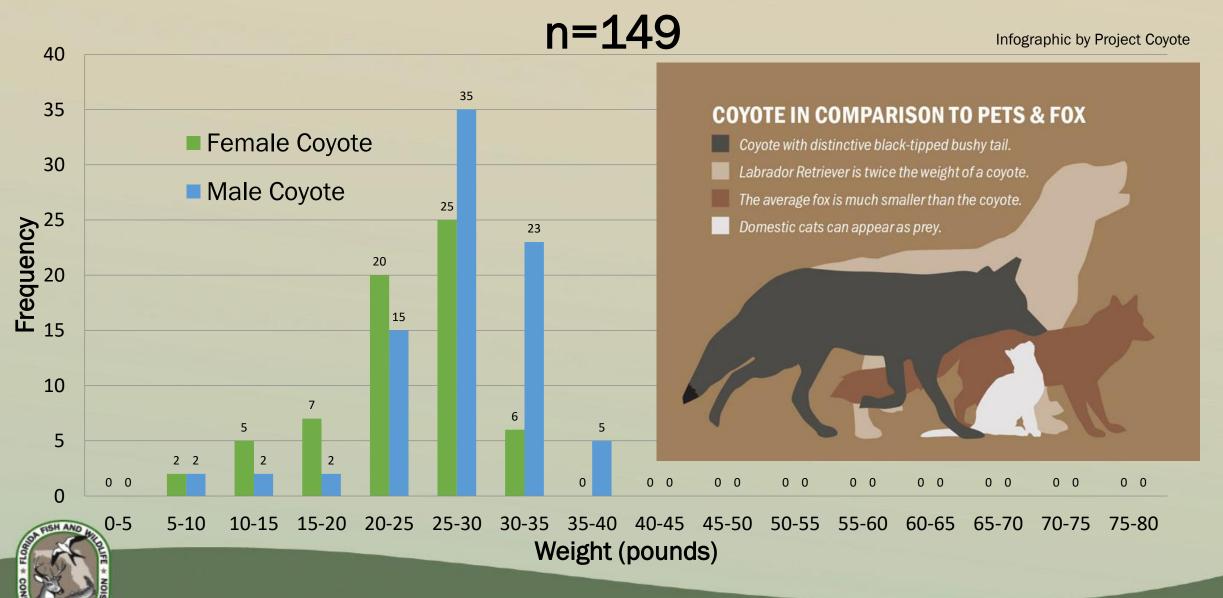


# Coyote diet study (2011- 2014)





# Coyote diet study (2011-2014)- weights



FWC diet study- 149 coyote carcasses collected statewide from 2011-2013

# Coyotes in Florida: ecological benefits?





Photo courtesy of Robert Steagall- Sanibel Island

# Control of smaller predators





Opossum, raccoon, gray fox, domestic cat, Norway rat

# Effects of coyotes as predators





Northern bobwhite, prairie warbler, loggerhead shrike, mottled ducks, roseate spoonbills; FWC photos

# Coyotes in Florida: Human conflicts



Photo courtesy of Robert Steagall-Sanibel Island



FWC photo- Clearwater



# Urban coyotes and pet loss





FWC photo- Clearwater

# FWC Trail Camera Images- Lithia, FL





2/24/2018 10:29 PM



2/25/2018 05:22 AM

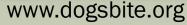


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#### Dog attacks vs. coyote attacks

- Coyotes (USA and Canada 1970- 2020):
  - 8.9 attacks/yr. (average)
  - 2 fatalities/50 yrs.
- Domestic dogs (USA):
  - 1,000 emergency room visits/day
  - 5 million cases/yr.
     require medical treatment
  - 236 fatalities during 2015-2020







#### Rabies in Florida: 2001-2020



20-Year Florida Animal Rabies Summary by Species: 2001-2020

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	20 Year Total	20 Year Average	Year of Last Positive Case
Bat	14	22	20	19	13	15	19	19	14	18	15	23	20	19	20	28	21	19	23	19	380	19	
Beaver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	<1	
Bobcat	1	1	0	0	1	0	0	2	3	2	4	2	3	4	1	2	1	0	3	1	31	2	
Cat	13	12	16	11	4	8	15	9	8	11	15	11	9	14	10	26	7	15	7	15	236	12	
Coatimundi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
Cow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1998
Coyote	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	<1	
Deer	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	<1	
Dog	0	1	1	2	0	2	2	0	2	1	0	1	0	1	2	5	1	2	3	1	27	1	
Ferret	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1996
Fox	14	15	10	8	6	10	5	2	11	6	15	21	20	20	27	29	31	27	29	34	340	17	
Goat	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	<1	
Horse	0	0	0	0	2	0	1	0	2	1	1	1	2	1	3	0	0	0	1	1	16	1	
Mule	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1911
Opossum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
Otter	2	3	1	0	1	0	0	0	0	0	3	1	0	4	1	1	1	1	0	2	21	1	
Panther	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1989
Pig	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
Raccoon	31	69	61	37	31	45	50	71	59	79	75	92	88	66	111	108	146	127	115	124	1585	79	
Skunk	4	2	1	2	0	1	0	2	2	1	0	2	2	2	1	2	1	0	0	0	25	1	
Squirrel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1961
Total	79**	126*	110	79	59	83	92	105	102	119	128	154	144	131	176	201	209	191	181	198	2667	133	



Florida Department of Health only performs rabies testing on suspect rabid animals that have potentially exposed a person, pet, livestock, or captive wildlife.

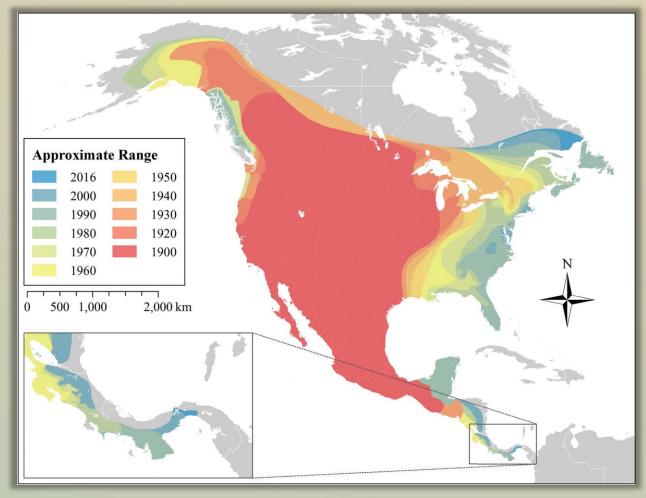
<sup>\*</sup>Not included in the 2019 count are two rabid raccoons from Miami-Dade and one rabid bat from Pinellas Counties that were tested as part of surveillance activities.

<sup>\*\*</sup>Not included in the 2020 count is one rabid raccoon from Miami-Dade County that was tested as part of surveillance activities.

## Can we get rid of coyotes?

#### NO

- Eradication efforts
- Breeding dynamics
- Territorial with high replacement
  - Adaptable and intelligent
    - Here to stay







### Prevent problems with coyotes-Secure Attractants

- NEVER feed coyotes!
  - Anything that can attract a dog, cat or raccoon can attract a coyote
- Secure garbage
- Clean up pet food, fallen fruit & bird feeders
- Keep cats indoors
- Keep dogs on leashes & supervised outdoors (especially small dogs)



# Prevent problems with coyotes- Hazing

- Human Dominance
- Rocks & sticks
- Whistles
- Pots & Pans
- Car & air horns
- "Coyote shaker"
- Motion sprinklers
- Water pistols
- Motion lights
- Firecrackers
  - Bear spray



### Coyotes in Florida: some advice

- Never feed coyotes or any wild animal
  - It is illegal to feed coyotes in Florida!
- Prevent access to garbage and pet food
- Keep cats indoors, have small dogs on a short leash or in a well fenced yard
- Follow hazing recommendations to consistently frighten coyotes away
- If a coyote approaches, lift small pets and children off the ground and be prepared to defend yourself (never run)



Photo courtesy of Dan Muccie- Estero



# Coyotes in Florida: Who should you contact when there is a problem?



FWC South Regional Office (561) 625-5122

Wildlife Alert Hotline (888) 404-3922

Email heather.leblanc@myfwc.com

Visit myfwc.com/coyotes



# Questions? Thank you!



Photo courtesy of Reinier Munguia- Lakeland

