

UF/IFAS Extension Sarasota County



LIFE: Learning In Florida's Environment

Photo credit: Jake Hartvigsen/Brand Underground



Dr. Katherine Clements and *LIFE* team!
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UF/IFAS Extension Sarasota County



LIFE Team: Facilitators

UF/IFAS Extension Sarasota County

Dr. Katherine Clements*, coordinator
Ecology and Natural Resources Educator

Sarah Davis*
4H Youth Development Agent

Dr. Pat Williams*
Residential Horticulture Agent

Armando Ubeda*
Sea Grant Agent

Florida Conservation Corps

Ryder Hochmuth*
AmeriCorps Project R.O.A.R.

Love Brouse
AmeriCorps Project A.N.T.

Jamie Henry
AmeriCorps Project A.N.T.

Sabrina Cummings*
Previous AmeriCorps Project R.O.A.R.

Oscar Scherer State Park

Ariel Sasloe*
Park Ranger

Brian Lutz
Park Ranger

Sarasota County Schools

Jennifer Dehart*
5th grade science

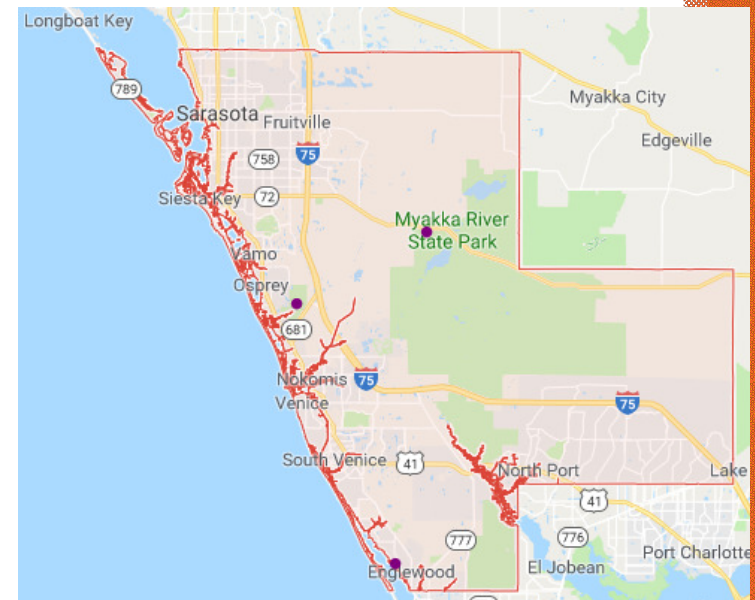
*co-authored educational materials



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LIFE in Sarasota County

- Historically, began in 2004 as a partnership between DEP and the Franklin County schools
- In Sarasota, co-ordinated by UF/IFAS Extension Sarasota County educator, Dr. Katherine Clements
- Partners include:
 - UF/IFAS Extension Sarasota County faculty
 - Oscar Scherer and Myakka River State Parks, staff and volunteers
 - Friends of Florida State Parks
 - FLCC, AmeriCorps A.N.T. and R.O.A.R. staff
 - Sarasota Schools, 5th grade science teacher
 - EdExplore SRQ



LIFE in Sarasota County

2017-18 Partners provide:

- Educational excellence and expertise (program development and delivery)
- Curriculum advice
- Organizational support (staff and site scheduling)
- Locations for field studies
- Over \$12,000 in staff and volunteer support
- Over \$3000 in supplies and equipment
- Promotion to teachers across county
- Ongoing support with printing and laminating





So What is *LIFE?*



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The Meaning of *LIFE*

Students become wildlife biologists, horticulturalists, marine scientists, ornithologists, and entomologists for the day!

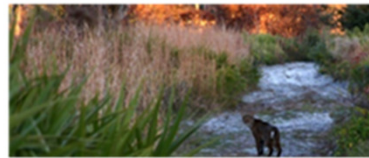
- 4th - 5th grade science curriculum-based field lab experiences
- Student one hour in-class preparation prior to field experience (3 times a year)
- 3 key ecosystems throughout the year
- 3 STEM field labs at each key ecosystem
- Pre-/Post-tests and Teacher Evaluations
- Teacher handbook provides lab lesson plans, data sheets, and literacy extensions
- Facilitated by scientist, educators, and land/resource managers
- Staff/volunteer training provided

FRESHWATER



Myakka River State Park
Fall

UPLANDS



Oscar Scherer State Park
Winter

COASTAL



Lemon Bay County Park
Spring

The Vision of *LIFE*

- Specific academic objectives for each lab
- Support science standards and curriculum
- Improve standardized test performance
- Provide background information and literacy extensions for in-class use
- Model science career opportunities
- Promote youth and families to experience public conservation lands
- Instill a sense of environmental stewardship
- Collaborate with colleagues
- Have fun with science in nature!



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LIFE: Freshwater

Myakka River State Park

- Labs:
 - Freshwater Plankton and Energy Flow
 - Microscope skills
 - Producers and Consumers
 - Human Impacts
 - Freshwater bird adaptations
 - Bills and beaks and more
 - Binocular skills
 - Ecosystem Explorers
 - Orienteering (compass skills)
 - Plant adaptations
 - Invasive plants and animals



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LIFE: Uplands

Oscar Scherer State Park

- Labs:
 - **Animal adaptations**
 - Behavioral and physical adaptations to the scrub environment
 - Endangered, invasive, and endemic species
 - **Upland bird adaptations**
 - Compare and contrast to freshwater birds
 - **Plant reproduction**
 - Asexual vs. sexual
 - Seed dispersal
 - Plant anatomy
 - Microscope skills



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LIFE: Coastal

Lemon Bay County Park

- Labs:
 - **Mangrove**
 - Identification, adaptations, and value
 - Coastal critters
 - **Enviroscape**
 - Connections between ecosystems
 - Plastic pollution
 - Human impact on the watershed
 - **Orienteering STEM Review**
 - Classification of organisms
 - Invertebrates vs. Vertebrates
 - Marine Invertebrate Phylla





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LIFE Outcomes in 2017-18 (pilot year)

- 180 students participated in each of the 3 modules 44.4% knowledge gain (Coastal)
- 86.3% average on review test suggests retention and understanding of delivered concepts
- 66% of students had never used a compass
- 70% of students had never been to Myakka River State Park
- 76.7% of students had never been to Lemon Bay Park
- 100% of teachers agreed that labs met benchmarks and information would extend into the classroom
- 100% of teachers want to participate in curriculum planning AND a professional development session
- 100% of staff and volunteers would like to continue participation

Winner of 2018 FANREP Outstanding 4H/Youth Development Program Award



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LIFE Lessons

- Start small and simple
- Program development and logistics take 10x longer than expected
- Teacher buy-in necessary: correlate to standards, reach out to curriculum specialist
- Teachers don't have extra time for anything, make it easy for them
- Evaluations short and done on-site
- Try to get ELA and Math teacher buy-in
- Cultivate committed partners
- Utilize Extension colleague expertise
- Thank your partners and volunteers everyday!
- Be ready for success!



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LIFE in Your County

- Can make this as big or small as you want
- Start with 6th-8th grade (or 5th)
- Partner with an existing LIFE site as a subject matter expert
 - <https://floridastateparksfoundation.org/LIFE-Program>
 - Tom Linley, Program Director
tom@floridastateparksfoundation.org
- Partner with a local State Park to start a new LIFE program
 - <https://www.floridastateparks.org/>
- Contact us for advice at any time!
- Enjoy your **LIFE** journey!





Thank You!

Come Experience *LIFE* with us!

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