

- Jorge Medina

News fEEB

Ecology and Evolutionary Biology Monthly Newsletter

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Crawfish Boil

The EEB annual Crawfish Boil will be held at 6 pm on April 23rd at Dr. Sword's house. Please [RSVP](#) if you plan to attend!

EEB Seminar Series

Apr. 4 – Mark Kirkpatrick, *University of Texas at Austin*

Apr. 11 – Joanna Lambert, *University of Colorado at Boulder*

Apr. 18 – Klaus-Peter Koepfli, *Smithsonian Conservation Biology Institute*

Apr. 25 – EEB Graduate Students

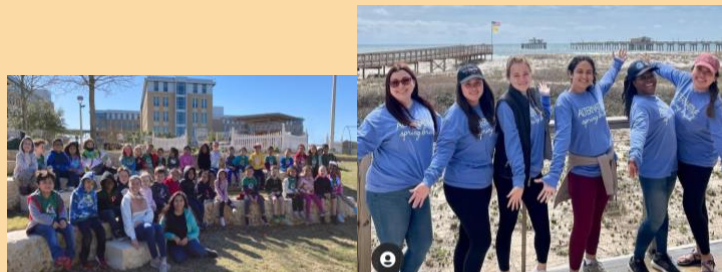
EEB Elections

EEB is searching for a new Chair Elect and Chair of the Curriculum Committee!

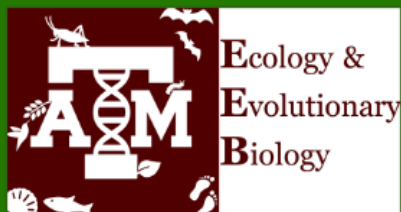
Nominate yourself or other EEB core faculty members by April 15th to Micky Eubanks (Micky.Eubanks@tamu.edu). Dr. Lee Fitzgerald will be taking over as Chair on August 1st.

Grad Student Updates

- EEBISO is looking for two EEB Students to serve either as President or Treasurer by April 14. Please email n.aguirre@tamu.edu or mflorkow@tamu.edu if you are interested!
- EEB and Entomology graduate students recently hosted kinder-4th grade students at TAMU to teach them about insects, in Spanish! Students found and collected insects, learned anatomy, and so much more!(below left image)



- The Alternative Spring Break - AL Crew cleaned up the Orange Beach sand dunes in partnership with Gulf Shores State Park. They bagged 60lbs of trash, built a boardwalk, composted, seined fishes, found gators and toured some of the island's 9 ecosystems using their free bikeshare service. This is a great TAMU service opportunity for both grads and undergrads and has different trips every year!
- Congratulations to EEB affiliate Jocelyn Holt for accepting an EEB Faculty Fellow position at Rice University!



For more information visit: eeb.tamu.edu

Follow us on Social Media!

Twitter: [@TAMUEEB](https://twitter.com/TAMUEEB)

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And updates on our [website!](#)

You or a colleague accomplish something? Let us know by tweeting #TAMUEEB

Want to submit a story or announcement for the *News fEEB*?

Let us know by [clicking HERE](#)

The Ecological Integration Symposium

We hope to see everyone at EIS (the Ecological Integration Symposium) on **April 7-8!** Check out the schedule of talks, speakers, and events to plan your time at the symposium. EIS promotional items (shirts, hats, and mugs) will be sold at the event.



Symposium Schedule

April 7th and 8th, 2022
Annenberg Presidential
Conference Center
Texas A&M University

Thursday, April 7th

Time	Event	Location
8:15 am - End of day	Registration (Morning Snacks + Refreshments)	Annenberg Presidential Conference Center (APCC)-Lobby
8:45 - 9:00 am	Welcoming Remarks	APCC- Frymire Auditorium
9:00 - 10:00 am	Dr. Richard Karban	APCC- Frymire Auditorium
10:10 - 11:10 am	Dr. Karen Beard	APCC- Frymire Auditorium
11:25 am - 12:25 pm	Dr. Peter Marra	APCC- Frymire Auditorium
12:25 - 2:00 pm	Lunch	Lunch with speakers, <i>limited openings look out for sign up email (Leach Teaching Gardens on campus)</i>
2:00 - 3:00 pm	Dr. Corrie Moreau	APCC- Frymire Auditorium
3:10 - 4:10 pm	Dr. Dan Blumstein	APCC- Frymire Auditorium
4:30 - 5:30 pm	Speaker Panel	APCC- Frymire Auditorium
6:00 - 7:30 pm	Happy Hour	Carney's Pub and Grill 3410 S College Ave, Bryan TX 77801

Friday, April 8th

Time	Event	Location
8:15 am - End of Day	Registration (Morning Snacks + Refreshments)	APCC- Lobby
8:30 - 9:00 am	Poster Check-In	APCC- Lobby
9:00 - 10:00 am	Student Oral Presentations	APCC- 1011B, 1011C, 1011 BC, Presidential Dining room
10:00 - 10:15 am	Break for Snacks and Refreshments	APCC- Lobby, Presidential Dining room
10:15 - 11:15 am	Student Oral Presentations	APCC- 1011B, 1011C, 1011 BC, Presidential Dining room
11:15 am - 11:30 am	Break for Snacks and Refreshments	APCC- Lobby, Presidential Dining room
11:30 - 12:30 pm	Student Oral Presentations	APCC- 1011B, 1011C, 1011BC, Presidential Dining room
12:30 - 3:00 pm	Lunch	On your own
2:30 - 3:00 pm	Poster Set Up for Students Presenting Posters	APCC- 1011B, 1011C, 1011BC
3:00 - 5:00 pm	Student Poster Session	APCC- 1011B, 1011C, 1011BC
5:00 - 5:30 pm	Awards and Closing Remarks	APCC- 1011B, 1011C, 1011BC
6:00 pm	Social (Food + Drinks provided)	Lee Fitzgerald's Home



For more information visit: eeb.tamu.edu

EIS Student Presentations

Oral Presentations

Friday, April 8th, 9 - 10 am



Start Time	APCC - 1011B Landscape and Riverscape Ecology	APCC - 1011C Ecology in Conservation	APCC - 1011BC Insect Ecology
9:00 am	Tatyana Canales Spatial distribution of road-kills and factors influencing road mortality for Florida Panther	Zachary Hutchens Urbanization increases isolation of a threatened fish species in East Texas streams: a 20-year perspective	Jorge Medina Duran New species discovered in Aggieldand? Morphological and molecular evidence reveals two new gregarine parasites (Apicomplexa) from crickets collected at Texas A&M campus
9:12 am	David Rosenbaum Occupancy and abundance of the Alligator Snapping Turtle in Texas	Liam Wolff Predictors of site occupancy of Bachman's Sparrows in Texas	Andie Miller Allochronic mating behavior in <i>Spodoptera fugiperda</i>
9:24 am	Hayden Roberts Tributary streams provide migratory fish with access to floodplain habitats in a regulated river: evidence from Alligator Gar, <i>Atractosteus spatula</i>	Jodie McVane Cover crops for conservation agriculture	Cassandra Durden Animal endectocides: a one health framework for the simultaneous control of multiple vector-borne diseases
9:36 am	Johnathan Ellard Assessing multi-scale movement of Alligator Gar in the Lower Brazos River Basin	Natalie Hamilton Predicted range shifts for bat species in Texas	Ali Lira Olguin Taxonomic revision of the genus <i>Megistopoda</i> Macquart, 1852 (Diptera: Streptidae) and preliminary results of their species delimitation
9:48 am	Corey Fielder Spatial ecology and habitat use of the Texas Alligator Lizard	Keith Andringa No differences in body size and condition of Purple Martins (<i>Progne subis</i>) along an urban-rural gradient in Texas.	Jennifer Rhinesmith-Carranza KGBeeetles: Insect Espionage and the Manipulation of Public Information

Oral Presentations

Friday, April 8th, 10:15 - 11:15 am



Start Time	APCC - 1011B Disease Ecology and Parasites	APCC - 1011C Community Ecology	APCC - 1011BC Behavioral Ecology
10:15 am	Scott Clark Impact of climate and land use on the spatial distribution of <i>Rickettsiosis</i> incidence in the United States	Rose Blanchard Changes in mosquito fish fin size in response to the presence of predators	Melanie Florkowski Gut microbiome diversity associated with exploratory behavior in a wild-caught songbird
10:27 am	Esha Kothapalli Spatial heterogeneity of climate and land use impacts on distributions of <i>Ehrlichia chaffeensis</i> Infections in the United States	Maria Alejandra Hurtado Materon Variability in ecological attributes of abundant species and phylogenetic distance increases with taxonomic diversity; insights for assembly mechanisms of Neotropical bat communities	Jacob Wolff Guadalupe Bass (<i>Micropterus treculii</i>) movement is predictable: implications for conservation
10:39 am	Katrina Keith Avian haemsporidian diversity in south Texas: new lineages and variation in prevalence between sampling sources and sites	Madeleine Thornley A quantitative dietary analysis of the white-tailed hawk at Mustang Island State Park	Colton Watts The evolution of female ornamentation in polygynous mating systems through selection for increased survival
10:51 am	Mycha A. Van Allen Comparing small mammal disease frequency between native and non-native grass rangelands in south Texas	Kylie Perez Vegetation selection and activity patterns of bats in the Texas coastal bend	
11:03 am	Jordan Salomon Host preference of <i>Triatoma gerstaeckeri</i> , a North American insect vector of the Chagas disease parasite		

Oral Presentations

Friday, April 8th, 11:30 am - 12:30 pm



Start Time	APCC - 1011B Ecology of Biological Invasions	APCC - 1011C Ecology of Plants and Ecosystems	APCC - 1011BC Genetics in Ecology
11:30 am	Erin Shepta Do native (<i>Cyprinodon rubrivittatus</i> and <i>Fundulus zebrius</i>) and invasive (<i>C. variegatus</i> and <i>F. grandis</i>) cyprinodontids partition their niche? Morphological, dietary, and isotopic evidence for trophic segregation from a large river in Texas	Katie Sanbonmatsu A global analysis of mosses reveals low phylogenetic endemism and highlights the importance of long-distance dispersal	Annabel Perry CaveCrawler: how coding and cavefish can help us understand evolution and human disease
11:42 am	Emily Brockinton Importance of anthropogenic determinants of <i>Tubastraea coccinea</i> invasion in the northern Gulf of Mexico	Samuel Neely Taphonomic bias and paleoecological insights from modern mangrove peats	Minal Jamsandekar The evolution of four chromosomal inversions underlying ecological adaptation in Atlantic Herring using long-read sequencing
11:54 am	Miranda Peterson Plants on the move: the current trend and future risk of Japanese Honeysuckle invasion in the southern United States	Josh Lerner Ecosystem-level patterns in tidal wetland resistance and resilience	Mary Smith Sequence and lineage characterization of major histocompatibility complex class I genes in Atlantic Herring using a comparative genomics approach
12:06 pm	Yasmin Quintana Isotopic niche overlap between the invasive armored catfish and native fish species in the Usumacinta River, Guatemala	Moeka Ono Soil carbon balance under different prescribed burning frequencies	

Poster Presentations

Friday, April 3rd, Afternoon

Station	Presenter	Title
1	Emily Leeke	Characterizing flea community diversity on wildlife within Sam Houston National Forest
2	McKenna Sanchez	Elevation in relation to avian malaria in the Chihuahuan desert and Edwards Plateau
3	Katelyn Sanchez	Prevalence of Avian Malaria in Armenia Birds of the Caucasus Mountains
4	Sophia Gartenstein	Repatriation of Illegally Collected Alligator Snapping Turtles Into Native Texas Waters
5	Nicole Stevens	Multiple stable-isotope compositions of Rock Iguana (<i>Cyclura carinata</i>) scat distinguish anthropogenic impacts on diet and sedimentary biogeochemistry
6	Miriam Catalan	A novel field methodology to calibrate thermal dissipation sap flow sensors by characterizing radial sap flux profiles
7	Janiece Jefferson	Measuring Grassland Ecosystem Productivity: Assessing Effects of Invasive vs Native Grass and Forb Dominance in the Texas Hill Country
8	Nyka Erickson	Generalist Pollinators and Pollinator Syndromes: A Case Study in North American Orchids
9	Hannah Mitchell, Coralie Domergue, Sarah Song, Gabrielle Davis	Evolution of sexual systems in the moss family Orthotrichaceae
10	Emily Russavage	The Correlation Between Direct and Indirect Defenses in Sorghum: Protection Against an Invasive Aphid Pest?
11	Kasuni Daundasekara	The evolutionary-genomic history of genes underlying serpentine tolerance in <i>Caulanthus amplexicaulis</i> var <i>barbarea</i>
12	Elyssa Garza	Using comparative genomics to understand serpentine tolerance in <i>Caulanthus amplexicaulis</i>
13	Isabella Svoboda	Microplastics in a post-hurricane peat deposit, Long Key, Florida
14	Courtney Plummer	Aquatic macroinvertebrates as sentinels of changes in local stream conditions in East Texas
15	Benton Fry	Multi-scale drivers of hypolimnetic oxygen depletion in six Minnesota lakes
16	Juan Lara	Taxonomic and morphological diversity of fish assemblages in Big Cypress Creek, Texas
17	Sandra Erue, Nelson Nwaiwu	Compound-20 (analog of curcumin) prevents acrolein-induced changes in rats



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Sounds of Spring



Spring has sprung! Over the past few weeks, the weather has warmed, birds have sung, flowers have bloomed, and more and more frogs have emerged to serenade listeners with jubilant nighttime song. This month's newsletter is a tribute to the amphibians you may hear this season ([click on the links to listen to their calls!](#))

An iconic species in our area is the [Gulf Coast Toad](#) (*Incilius nebulifer*). It has dry, bumpy skin, and a distinctive lighter stripe running along its spine.



The [Southern Leopard Frog](#) (*Lithobates sphenoccephalus*) has dark, roundish spots on top of a green or brown background. They are not particular in the wetlands they occupy and have a chuckle-like call.



Bullfrog



Green frog

The [American Bullfrog](#) (*Lithobates catesbeianus*) is the largest frog in North America and can weigh up to 1.5 pounds! They are usually green or tan in color, and small individuals are easily confused with the [Green Frog](#) (*Lithobates clamitans*). They can be differentiated by the placement of their dorsolateral ridges (raised lines on their backs) which run down the entirety of the green frog's back and curve around the tympanum (round external ear) in the bullfrog.

The [Green Treefrog](#) (*Hyla cinerea*) is usually bright green (though they can also be dull green, yellow, or gray depending on their environment/activity level) and often has a black and cream-colored stripe running down its side.



The [Gray Treefrog](#) (*Hyla versicolor*) is generally gray or green (and can change color in a few hours) with darker blotches on their backs. They usually have bumpy skin and their call is a high-pitched trill.



[Blanchard's Cricket Frog](#) (*Acris blanchardi*) is a very small species – growing just 1 inch long! This frog has darkly pigmented bumpy skin and resides in sunlit areas near the edges of permanent bodies of water.



Another small species in the area is the [Rio Grande Chirping Frog](#) (*Eleutherodactylus cystignathoides*). Unlike our other species, these frogs have direct development (they lack a tadpole stage) and both males and females make calls.