

**Conspicuous insects and other invertebrates observed on the UNF campus
Chuck Hubbuch (2009 to present), Justin Lemmons (2014 – 2015)**

It is estimated that over twelve thousand insect species live in Florida. Some are restricted to small areas or specific habitats while others range widely across the region. Many are so small that we pass them unaware of their presence. Following is a list of some of the more conspicuous insects that have been observed on campus.

Dr. Kerry Clark (College of Health) contributed to this list. Environmental Services Inc. provided aquatic invertebrate identifications. Others contributed as indicated below.

References:

- Capinera, J.L. C.W. Scherer and J.M. Squitier. 2001. Grasshoppers of Florida. University Press of Florida.
Dunkle, S.W. 1989. Dragonflies of the Florida Peninsula, Bermuda, and the Bahamas. Scientific Publishers. Gainesville, FL.
Butterflies and Moths of North America (www.butterfliesandmoths.org)
Bug Guide: (www.bugguide.net)

Phylum Arthropoda

Amphipoda: shrimp

Gammarus sp. (ESI, macroinverts of Tech Park streams, 2012-2016)

Blattodea: roaches

Eurycotis floridana – Florida woods cockroach (J. Lemmons, 2015)

Periplaneta americana – American cockroach (J. Lemmons, 2014)

Coleoptera: beetles

Acanthocinus nodosus – lesser pine borer (J. Lemmons, 2013)

Alnus oculatus – eyed click beetle

Calligrapha cephalanthi – (J. Lemmons and Kacie Smith, 2015)

Calosoma scrutator – caterpillar hunter, fiery searcher (rarely sighted)

Canthon (Boreocanthon) depressipennis (J. Lemmons, 2015)

Chalcophora georgiana – southern sculptured pine borer

Chelymorpha cassidea – argus tortoise beetle (J. Lemmons & C. Hubbuch, 2015)

Chilocorus stigma – twice-stabbed lady beetle (J. Lemmons, 2013)

Chlaenius sp. – vivid metallic ground beetle (J. Lemmons, 2015)

Chrysomela scripta – cottonwood leaf beetle (J. Lemmons, 2013)

Coccinella septempunctata – seven-spotted lady beetle (J. Lemmons, 2013)

Coleomegilla maculata – spotted lady beetle (J. Lemmons, 2013)

Cotalpa lanigera – goldsmith beetle (rarely sighted)

Cotinis nitida – copper & green June beetle

Cryptocarenum seriatus (J. Lemmons, Sedonia Steininger of Backyard Bark Beetles, 2015)

Curculio sp. (Hubbuch & Lemmons, 2014)

Cycloneda sanguinea – spotless lady beetle (J. Lemmons, 2013)

Cyphon spp. – marshbeetles (ESI, macroinverts of Tech Park streams, 2012-2015)

Desmopachria sp. – diving beetles (ESI, macroinverts of Tech Park streams, 2012-2015)
Diaperis maculata (J. Lemmons, 2013)
Diaperis nigronotata (J. Lemmons, 2013)
Dineutus spp. – whirligig beetles (ESI, macroinverts of Tech Park streams, 2012-2016)
Dubiraphia bivittata – riffle beetles (ESI, macroinverts of Tech Park streams, 2012-2015)
Dynastes tityus – rhinoceros beetle
Enoclerus ichneumoneus – checkered beetle (J. Lemmons, 2015)
Euphoria sepulcralis – dark flower scarab
Geotrupes sp. – earth-boring beetle (J. Lemmons, 2015)
Gyretes sp. – whirligig beetles (ESI, macroinverts of Tech Park streams, 2012-2015)
Gyrinus sp. – whirligig beetles (ESI, macroinverts of Tech Park streams, 2012-2015)
Harmonia axyridis – multicolored Asian lady beetle (J. Lemmons, 2013)
Helichus sp. – long-toed water beetles (ESI, macroinverts of Tech Park streams, 2012-2015)
Hemisphaerota cyanea – palmetto tortoise beetle (Hubbuck & Lemmons, 2015)
Hydrochara sp. – water scavenger beetles (ESI, macroinverts of Tech Park streams, 2012-2015)
Hypothenemus eruditus (J. Lemmons, Sedonia Steininger of Backyard Bark Beetles, 2015)
Hypothenemus seriatus (J. Lemmons, Sedonia Steininger of Backyard Bark Beetles, 2015)
Ips grandicollis – five-spined pine bark beetle (James Moody, ESI, 2013)
Lilioceris cheni – air potato leaf beetle (Hubbuck & Lemmons, September 2014)
Lytta polita – bronze blister beetle (Michael Boyles and J. Lemmons, 2015)
Macronychus glabratus – riffle beetle (ESI, macroinverts of Tech Park streams, 2012-2015)
Macronychus sp. – riffle beetle (ESI, macroinverts of Tech Park streams, 2012-2015)
Megalodacne heros – pleasing fungus beetle (Hubbuck & Lemmons, 2014)
Microcylloepus pusillus – riffle beetle (ESI, macroinverts of Tech Park streams, 2012-2015)
Monochamus sp. (*M. carolinensis* or *M. titillator*) – pine sawyer (Hubbuck & Lemmons, 2013)
Necrophila americana – American carrion beetle (J. Lemmons, 2015)
Nemognatha piazzata – blister beetle (J. Lemmons, 2015)
Nemognatha punctulata – blister beetle (J. Lemmons, 2015)
Neoporus spp. – predaceous diving beetle (ESI, macroinverts of Tech Park streams, 2012-2015)
Odontotaenius disjunctus – Patent leather beetle (J. Lemmons, 2013)
Oncideres cingulata – twig girdler
Oreodytes spp. – predaceous diving beetle (ESI, macroinverts of Tech Park streams, 2012-2015)
Phyllophaga sp. – May beetle
Rhynchophorus cruentus – palm weevil
Stenelmis spp. – riffle beetle (ESI, macroinverts of Tech Park streams, 2012-2016)
Stictotarsus spp. – predaceous diving beetle (ESI, macroinverts of Tech Park streams, 2012-2015)

Strategus antaeus – ox beetle (J. Lemmons, 2014)
Trichiotinus sp. – flower scarab
Trigonopeltastes delta – delta flower scarab (J. Lemmons, 2015)
Trirhabda bacharidis – groundselbush beetle (J. Lemmons, 2015)
Typocerus velutinus – banded longhorn (J. Lemmons, 2015)
Typocerus zebra – zebra longhorn (J. Lemmons, 2015)
Xyleborinus saxeseni – fruit-tree pinhole borer (J. Lemmons, Sedonia Steininger of Backyard Bark Beetles, 2015)
Xyleborus affinis (J. Lemmons, Sedonia Steininger of Backyard Bark Beetles, 2015)
Xylosandrus amputatus (J. Lemmons, 2014)

Decapoda: crayfish

Palaemonetes paludosus (ESI, macroinverts of Tech Park streams, 2012-2015)
Palaemonetes spp. (ESI, macroinverts of Tech Park streams, 2012-2016)
Procambarus spp. (ESI, macroinverts of Tech Park streams, 2012-2016)
aff. *Procambarus alleni* – Florida crayfish (tentative ID by Justin Lemmons, 2014)

Diptera: flies and relatives

Ablabesmyia spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2016)
Aedes, *Culex* and others – mosquito (80 mosquito spp. in Florida)
Alotanypus sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2016)
Anopheles sp. – mosquito (ESI, macroinverts of Tech Park streams, 2012-2015)
Apedilum spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Bezzia spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Chironomus sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Chrysops spp. – deer fly
Cladotanytarsus spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Clinotanypus spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Corynoneura spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Cryptochironomus sp. - (ESI, macroinverts of Tech Park streams, 2016)
Diachlorus ferrugatus – yellow fly
Dicrotendipes sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Einfeldia sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Goeldichironomous sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Kiefferulus sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Labrundinia pilosella – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Labrundinia spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2016)
Lucilia sericata – common green bottle fly
Megistocera sp. – crane fly (ESI, macroinverts of Tech Park streams, 2012-2015)
Musca domestica – house fly
Mydas clavatus – mydas fly
Nanocladius spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Ortocladius spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Paramerina sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Paratanytarsus sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Plecia nearctica – lovebug (Lemmons, 2014)

Polypedilum convictum – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Polypedilum fallax – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Polypedilum trigonus – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Polypedilum tritum – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Procladius spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2016)
Prosimulium sp. – black fly (ESI, macroinverts of Tech Park streams, 2012-2015)
Psectrocladius sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Rheotanytarsus spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Simulium spp. – black fly (ESI, macroinverts of Tech Park streams, 2012-2015)
Stempelinella spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Stenochironomus spp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Tanytarsus sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Tetanocera sp. – marsh fly (ESI, macroinverts of Tech Park streams, 2012-2015)
Tribelos jucundum – midge (ESI, macroinverts of Tech Park streams, 2012-2015)
Tribelos sp. – midge (ESI, macroinverts of Tech Park streams, 2012-2015)

Ephemeroptera: mayflies

Baetidae unid. (ESI, macroinverts of Tech Park streams, 2012-2015)
Caenis spp. (ESI, macroinverts of Tech Park streams, 2012-2016)
Ephemerella sp. (ESI, macroinverts of Tech Park streams, 2012-2015)
Leptophlebia spp. (ESI, macroinverts of Tech Park streams, 2012-2015)
Stenonema spp. (ESI, macroinverts of Tech Park streams, 2012-2016)

Hemiptera: true bugs

Abedus sp. – giant water bug (ESI, macroinverts of Tech Park streams, 2012-2015)
Acanalonia servillei – acanaloniid planthopper (J. Lemmons, 2015)
Acanthocephala terminalis – leaf-footed bug
Aquarius sp. – water strider (ESI, macroinverts of Tech Park streams, 2012-2015)
Arilus cristatus – wheel bug (J. Lemmons, 2013)
Belastoma or *Lethocerus* sp. – giant water bug (7 spp. in Florida)
Belastoma sp. – giant water bug (ESI, macroinverts of Tech Park streams, 2012-2015)
Cyrtoptus belfragei – fulgorid planthopper (J. Lemmons and A. Baeurnfeind, 2014)
Diceroprocta olympusa – southern dog day cicada
Draeculacephala floridana – leafhopper (J. Lemmons, 2013)
Flataloides scabrosus – flatid planthopper (Hubbuch & Lemmons, 2015)
Leptoglossus phyllopus – leaf-footed bug (J. Lemmons, 2013)
Euthyrhynchus floridanus – Florida predatory stink bug (J. Lemmons and Kyle Reeves, 2014)
Largus succinctus (J. Lemmons, 2015)
Loxa flavicollis – stink bug (J. Lemmons, 2014)
Micranthia quadrimaculata – shorebug (ESI, macroinverts of Tech Park streams, 2012-2015)
Murgantia histrionica – harlequin bug (rarely sighted in Preserve)
Nersia florida – planthopper (J. Lemmons, 2013)
Nezara viridula – southern green stink bug (J. Lemmons, 2013)
Notonecta sp. – backswimmer (ESI, macroinverts of Tech Park streams, 2012-2015)

Ormenaria rufifascia – palm flatid planthopper (J. Lemmons, 2013)
Orsilochides guttata – shieldbacked bug (J. Lemmons, 2013)
Tetyra bipunctata – shieldbacked pine seed bug (J. Lemmons and Kacie Smith, 2014)
Tibicen davisii davisii – Davis' southeastern dog-day cicada
Prosapia bicincta – two-lined spittlebug (J. Lemmons, 2013)
Spartocera fusca (J. Lemmons, 2013)
Zelus longipes – milkweed assassin bug (J. Lemmons, 2013)

Hymenoptera: wasps, bees and ants

Apis mellifera – honey bee
Bombus spp. – bumble bee
Camponotus sp. – carpenter ant (J. Lemmons, 2015)
Campsomeris plumipes fossulana – (a scoliid wasp)
Dolichovespula maculata – bald-faced hornet
Dorymyrmex bureni – pyramid ant (Ben Gochnour, J. Lemmons, 2014)
Eumenes fraternus – potter wasp (J. Lemmons, 2013)
Isodontia philadelphica – grass-carrying wasp
Monobia quadridens – four-toothed mason wasp (J. Lemmons, 2014)
Pogonomyrmex badius – Florida harvester ant
Pogonomyrmex sp. – harvester ant
Polistes spp. – paper wasp
Pseudomyrmex gracilis – elongate twig ant (J. Lemmons, 2015)
Solenopsis invicta – fire ant
Sphecius speciosus – cicada killer
Vespula squamosa – southern yellowjacket
Xylocopa spp. – carpenter bee

Isopoda: isopods

Asellus sp. (ESI, macroinverts of Tech Park streams, 2012-2015)
Caecidotea sp. (ESI, macroinverts of Tech Park streams, 2012-2016)

Lepidoptera: butterflies and relatives

Papilionoidea – butterflies

Lycaenidae

Atlides halesus – great purple hairstreak (expected)
Calycopis cecrops – red-banded hairstreak
Satyrium favonius – Southern hairstreak
Strymon melinus – gray hairstreak (J. Lemmons, 2013)

Nymphalidae

Agraulis vanillae – Gulf fritillary
Anartia jatrophae – white peacock
Danaus gilippus – queen butterfly
Danaus plexippus – monarch butterfly
Enodia portlandia – Southern pearly eye butterfly
Heliconius charitonius – zebra longwing
Junonia coenia – common buckeye

Limenitis archippus – viceroy
Limenitis arthemis – red spotted purple
Megisto cymela – little wood-satyr butterfly
Nymphalis antiopa – mourning cloak
Phyciodes phaon – Phaon crescent
Satyrodes appalachia – Appalachian brown (Berthet, Bill. "Sharing Memories with Butterflies." *Palmetto* 30.2 (2013): 12-15.)
Vanessa atalanta – red admiral
Vanessa virginiensis – American painted lady

Papilionidae

Battus philenor – pipevine swallowtail
Eurytides marcellus – zebra swallowtail
Papilio cresphontes – giant swallowtail
Papilio glaucus – tiger swallowtail
Papilio palamedes – palamedes swallowtail
Papilio polyxenes – black swallowtail
Papilio troilus – spicebush swallowtail

Pieridae

Eurema daira – barred yellow
Eurema lisa – little yellow
Phoebis philea – orange-barred sulfur (J. Lemmons, 2013)
Phoebis sennae – cloudless sulfur butterfly

Hesperioidea – skippers

Hesperiidae

Epargyreus clarus – silver-spotted skipper (Hubbuck & Lemmons, 2014)
Ephyriades brunneus – Florida duskywing
Hylephila phyleus – fiery skipper
Megathymus yuccae – giant yucca skipper
Pyrgus oileus – tropical checkered skipper
Urbanus proteus – long-tailed skipper

Moths

Erebidae

Apantesis phalerata – (May 2012)
Ascalapha odorata – black witch
Catocala carissima – carissima underwing (J. Lemmons, 2013)
Estigmene acrea – salt marsh moth (Hubbuck & Lemmons, 2014)
Hypercompe scribonia – giant leopard moth (J. Lemmons, 2013)
Hyphantria cunea – fall webworm
Orgyia detrita – oak tussock moth
Orgyia leucostigma – white-marked oak tussock moth
Ptichodis vinculum – black-tipped Ptichodis moth (J. Lemmons, 2013)
Utetheisa ornatrix – bella moth

Geometridae

Phrudocentra centrifugaria (J. Lemmons, 2015)

Lasiocampidae

Malacosoma americana – eastern tent caterpillar

Limacodidae

Acharia stimulea – saddleback caterpillar

Megalopygidae

Megalopyge opercularis – southern flannel moth (J. Lemmons, 2013)

Noctuidae

Acronicta americana – American dagger moth (J. Lemmons, 2014)

Exyra semicrocea – pitcher plant mining moth (J. Lemmons, 2014)

Schinia jaguarina – jaguar flower moth (J. Lemmons, 2015)

Schinia sanguinea – bleeding flower moth (J. Lemmons, 2013)

Spodoptera dolichos – sweet potato army worm (J. Lemmons, 2016)

Spragueia onagrus – black-dotted spragueia (J. Lemmons, 2015)

Pyralidae

Cactoblastis cactorum – cactus moth (on cultivated plants, A. Taylor & Hubbuch, 2014)

Omphalocera munroei – asimina webworm (Dr. Ann Cox & Hubbuch, 2015)

Saturniidae

Actias luna – luna moth

Anisota consularis – consular oakworm moth (J. Lemmons, 2015)

Anisota virginiensis – pink-striped oakworm moth (Hubbuch & Lemmons, 2013)

Automeris io – io moth

Callosamia securifera – sweetbay silk moth (Hubbuch & Lemmons, 2014)

Dryocampa rubicunda – rosy maple moth (Lemmons, 2014)

Eacles imperialis – imperial moth (Paul Yeoman, 2013)

Hemileuca maia – buck moth

Hyalophora cecropia – cecropia moth

Telea polyphemus – polyphemus moth

Sphingidae

Amphion floridensis – nessus sphinx (Hubbuch & Lemmons, 2014)

Enyo lugubris – mournful sphinx (J. Lemmons, 2013)

Eumorpha fasciatus – banded sphinx moth

Xylophanes tersa – tersa sphinx moth (J. Lemmons, 2013)

Mantodea: mantids

Brunneria borealis – Brunner's mantis (J. Lemmons, 2013)

Gonatista grisea – grizzled mantid

Stagmomantis carolina – Carolina mantis (J. Lemmons, 2015)

Thesprotia graminis – grass mantid

Megaloptera: alderflies, dobsonflies and fishflies

Chauliodes rastricornis – spring fishfly (J. Lemmons, 2013)

Corydalus sp. (ESI, macroinverts of Tech Park streams, 2016)

Sialis sp. – alder fly (ESI, macroinverts of Tech Park streams, 2012-2015)

Neuroptera: antlions, lacewings and allies

Dicromantispa sayi – mantisfly, mantispa (with J. Lemmons, 2013)

Odonata: dragonflies and damselflies

Amphiagrion spp. – damsel (ESI, macroinverts of Tech Park streams, 2012-2015)
Anax junius – green darner
Anax longipes – comet darner (rare, 8/30/13)
Argia aris – damselfly (ESI, macroinverts of Tech Park streams, 2012-2016)
Argia fumipennis atra – black dancer damselfly
Argomorphus pallidus – gray-green clubtail (J. Lemmons, 2015)
Boyeria vinosa – darner (ESI, macroinverts of Tech Park streams, 2012-2015)
Brachymesia gravida – four-spotted pennant
Calopteryx maculata – ebony jewelwing damselfly
Calopteryx sp. – damsel (ESI, macroinverts of Tech Park streams, 2012-2015)
Celithemis eponina – Halloween pennant
Chromagrion sp. – damselfly (ESI, macroinverts of Tech Park streams, 2012-2015)
Didymops spp. – cruiser dragonfly (ESI, macroinverts of Tech Park streams, 2016)
Dromogomphus armatus – southeastern spinyleg (J. Lemmons, 2014)
Dromogomphus sp. – spinyleg (ESI, macroinverts of Tech Park streams, 2012-2016)
Enallagma sp. – bluet damsel (ESI, macroinverts of Tech Park streams, 2012-2015)
Erythemis simplicicollis – eastern pondhawk
Erythrodiplax connata minuscula – blue dragonlet
Lanthus sp. clubtail dragonfly (ESI, macroinverts of Tech Park streams, 2016)
Libellula axilena – roseate skimmer
Libellula semifasciata – painted skimmer (ESI, macroinverts of Tech Park streams, 2012-2015)
Libellula spp. – skimmer (ESI, macroinverts of Tech Park streams, 2012-2015)
Libellula vibrans – great blue skimmer (J. Lemmons, 2013)
Macromia sp. – cruiser dragonfly (ESI, macroinverts of Tech Park streams, 2016)
Neoerythromna spp. – damselfly (ESI, macroinverts of Tech Park streams, 2012-2015)
Pachydiplax longipennis – blue dasher (ESI, macroinvertebrates of Tech Park streams, 2012-2015)
Perithemis tenera – eastern amberwing (J. Lemmons, 2013)
Plathemis lydia – common whitetail (uncommon here)
Tamea carolina – Carolina saddlebags
Tamea lacerata – black-mantled dragonfly

Orthoptera: grasshoppers, katydids and crickets

Achurum carinatum – longheaded toothpick grasshopper
Aptenopedes sphenarioides – linearwinged grasshopper
Arphia granulata – southern yellowwinged grasshopper (J. Lemmons, 2013)
Atlanticus gibbosus – robust shieldbacked katydid (J. Lemmons, 2013)
Chortophaga australior – southern redlegged grasshopper (J. Lemmons & Hubbuch, 2013)
Conocephalus fasciatus fasciatus – slender meadow katydid (J. Lemmons, 2013)
Dichromorpha elegans – elegant grasshopper (Hubbuch & McGregor, 2011)

Mermiria bivittata – two-striped mermiria (Hubbuck, J. Lemmons & Amanda Andersen, 2013)

Mermiria picta – lively mermiria

Pardalophora phoenicoptera – orangewinged grasshopper (J. Lemmons, 2013)

Paroxya atlantica – Atlantic grasshopper (Hubbuck & McGregor, 2011)

Paroxya clavuliger – olivegreen swamp grasshopper (Hubbuck & Lemmons, 2013)

Psinidia fenestralis – longhorn bandwinged grasshopper (Hubbuck & McGregor, 2011)

Rhaphidophoridae unid. – camel cricket (J. Lemmons, 2014)

Romalea microptera – eastern lubber grasshopper

Scapteriscus borellii – southern mole cricket (J. Lemmons, 2014)

Scapteriscus vicinus – tawny mole cricket (J. Lemmons, 2014)

Schistocera alutacea – rusty grasshopper

Schistocerca americana – American bird grasshopper

Schistocerca obscura – obscure bird grasshopper

Spharagemon crepitans – crepitating grasshopper (J. Lemmons, 2013)

Stenacris vitrepennis – glassywinged toothpick grasshopper

Phasmatodea – walking sticks

Anisomorpha buprestoides – two-striped walkingstick (J. Lemmons, 2013)

Trichoptera: caddisflies

Ceraclea sp. (ESI, macroinverts of Tech Park streams, 2012-2015)

Cheumatopsyche spp. (ESI, macroinverts of Tech Park streams, 2012-2016)

Oecetis inconspicua (ESI, macroinverts of Tech Park streams, 2012-2015)

Setodes sp. (ESI, macroinverts of Tech Park streams, 2012-2015)

Arachnids

Araneae: spiders

Argiope aurantia – yellow garden spider

Dolomedes triton – six-spotted fishing spider

Dolomedes albineus – whitebanded fishing spider (Hubbuck & Lemmons, 2015)

Gasteracantha cancriformis – spinybacked spider

Latrodectus mactans – black widow spider

Leucauge venusta – orchard orbweaver, orchard spider

Mecynogea lemniscata – basilica spider (Hubbuck & Chelsea Metzgar, 2013)

Micrathena gracilis – spined micrathena

Micrathena sagittata – arrowshaped micrathena (J. Lemmons & Nichole Bishop, 2013)

Misumenoides formosipes – whitebanded crab spider (Lemmons, 2013)

Neoscona domiciliorum – spotted orbweaver

Nephila clavipes – golden silk spider, banana spider

Peucezia viridans – green lynx spider

Thiodina sylvana (J. Lemmons, 2015)

Tigrosa georgicola – wolf spider (J. Lemmons, 2015)

Verrucosa arenata – arrowhead orb weaver (rarely sighted)

Scorpiones: scorpions

Centruroides hentzi – Hentz striped scorpion (J. Lemmons, 2013)

Ixodida: ticks (documented by Dr. Kerry Clark)

Amblyomma americanum – lone star tick

Amblyomma maculatum – Gulf Coast tick

Amblyomma tuberculatum – gopher tortoise tick

Dermacentor variabilis – American dog tick

Ixodes affinis – no common name

Ixodes minor – no common name

Ixodes scapularis – Eastern blacklegged tick

Centipedes and Millipedes

Narceus americanus – millipede

Scolopendra viridis – Florida blue centipede (J. Lemmons, 2013)

Sigmoria latior – millipede (J. Lemmons, 2013)

Phylum Mollusca

Amnicola sp. (ESI, macroinverts of Tech Park streams, 2012-2015)

Belocaulus angustipes – blackvelvet leatherleaf slug (exotic, Bill Frank, www.jaxshells.org)

Bradybaena similaris – Asian tramp snail (exotic, Annie Bush, B51, 2013)

Campeloma floridense (ESI, macroinverts of Tech Park streams, 2012-2015 and Bill Frank)

Drymaeus dormani – manatee snail (Jake FitzRoy, 2014)

Elliptio occulta - hidden spike (Bill Frank, www.jaxshells.org)

Euconulus trochulus - silk hive (Bill Frank, www.jaxshells.org)

Euglandina rosea – rosy wolf snail

Ferrissia spp. – limpet (ESI, macroinverts of Tech Park streams, 2012-2015)

Fossaria cubensis (ESI, macroinverts of Tech Park streams, 2012-2015)

Glyphyalinia solida - imperforate glyph (Bill Frank, www.jaxshells.org)

Glyphyalinia umbilicata - Texas glyph (Bill Frank, www.jaxshells.org)

Hawaiiia minuscula - minute gem (Bill Frank, www.jaxshells.org)

Helicodiscus parallelus - compound coil (Bill Frank, www.jaxshells.org)

Laevapex spp. – limpet (ESI, macroinverts of Tech Park streams, 2012-2015)

Lamellaxis micrus - tiny awlslail (exotic, Bill Frank, www.jaxshells.org)

Lobosculum pustula - grooved liptooth (Bill Frank, www.jaxshells.org)

Micromenetus floridanus (ESI, macroinverts of Tech Park streams, 2012-2015)

Micromenetus sp. (ESI, macroinverts of Tech Park streams, 2012-2015)

Nesovitrea dalliana - depressed glass (Bill Frank, www.jaxshells.org)

Opeas pyrgula - sharp awlslail (exotic, Bill Frank, www.jaxshells.org)

Philomycus carolinianus – Carolina mantleslug (J. Lemmons, 2013)

Physella heterostropha - pewter physa (Bill Frank, www.jaxshells.org)

Planorbella duryi - Seminole rams-horn (Bill Frank, www.jaxshells.org)

Polygyra cereolus - southern flatcoil (Bill Frank, www.jaxshells.org)
Pomacea paludosa - Florida applesnail (Bill Frank, www.jaxshells.org)
Praticolella jejuna - Florida scrubs nail (Bill Frank, www.jaxshells.org)
Pseudosuccinea columella - mimic lymnaea (Bill Frank, www.jaxshells.org)
Sphaerium spp. – clam (ESI, macroinverts of Tech Park streams, 2012-2015)
Strobilops aeneus - bronze pinecone (Bill Frank, www.jaxshells.org)
Strobilops texasianus - southern pinecone (Bill Frank, www.jaxshells.org)
Uniomerus carolinianus - Florida pondhorn (Bill Frank, www.jaxshells.org)
Utterbackia imbecillis - paper pondshell (exotic, Bill Frank, www.jaxshells.org)
Villosa vibex - southern rainbow (Bill Frank, www.jaxshells.org)
Ventridens demissus – perforate dome snail (Annie Bush, B51, 2013)
Zonitoides arboreus – quick gloss, orchid snail

Phylum Annelida

Subclass Hirudinea: leeches

Helobdella spp. (ESI, macroinverts of Tech Park streams, 2012-2015)

Placobdella sp. (ESI, macroinverts of Tech Park streams, 2012-2015)

Subclass Oligochaeta

Lumbriculidae unid. (ESI, macroinverts of Tech Park streams, 2012-2015)

Other organisms

Anaplasma phagocytophilum – cause of human granulocytic anaplasmosis (Dr. Kerry Clark)

Babesia microti – cause of human babesiosis (Dr. Kerry Clark)

Borrelia burgdorferi – Lyme borrelia (Dr. Kerry Clark)

Borrelia lonestari – found in lonestar ticks (Dr. Kerry Clark)