

Texas Master Naturalists ROLLING PLAINS

NEWSLETTER

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June 2015

The Crane Fly: A Skeeter Eater?

Written by Lucile Bayon Hume

The insects we call mosquito hawks aren't, and their reputation is a hoax.

We've been duped, I tell you!

The long-legged fly that goes bump in its flight is actually an adult crane fly as opposed to the mosquito hawk—a mosquito that kills the larvae of other mosquitoes.

The crane fly adult doesn't eat mosqui-

toes or much of anything else. Though not a hoax on the same level as jokesters purposefully impersonating Sasquatch by wearing gorilla suits and leaving humongo faux footprints, we humans have embraced this hoax, taking to heart the crane fly/mosquito hawk myth. We want to believe this fragile, clumsy, goofy bug is a hero capable of silencing the incessant whine of the disease-bearing mosquito. But he isn't, never has been, and is anatomically incapable of killing or eating a mosquito.

We're all too personally familiar with the crane flies that arrive at the first sign of spring in clouds of large, slender flapping wings and spindly, dangly legs, bouncing like helium balloons off walls and ceilings. Even if we don't know them as crane flies—an attribution derived from their resemblance to the birds of the same name with long legs and slow flight—we know them. Their throngs rise up and awkwardly air dance in front of and around us as we stroll through high grass.

They love light, like their moth and June bug compatriots, and hover near porch lights and windows opening into our private spaces, which they unintentionally invade as they clamor for the lights. Fragile body parts are often left behind on their careening paths as they try to maneuver through the obstacle courses our homes present.

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JUNE 2: Rolling Plains Chapter monthly meeting is at River Bend Nature Center. **Location:** 2200 3rd Street, Wichita Falls, Texas.

Time: 7:00 PM. **Program:** Shannon Rutledge-Hopkins. She runs P.L.A.N.T.S. Preserving Local Agri-History of North Texas in Seeds: A Seed Library.

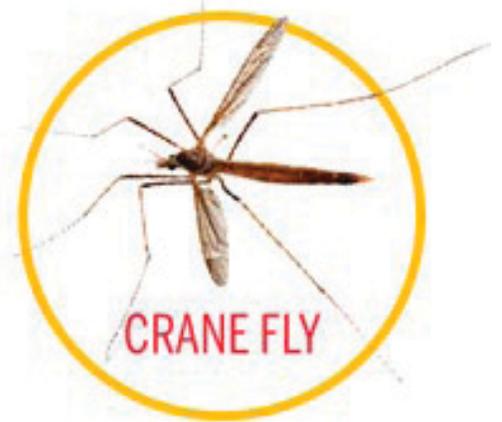
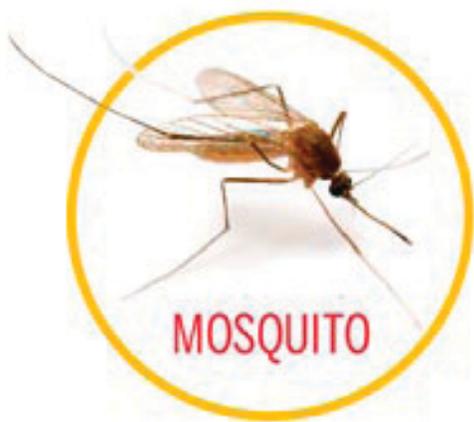
JUNE 3: 2015 Rolling Plains Quail Appreciation Day **Location:** Electra AgBarn, West Business 287, Electra, Tex **Time:** 8:00 AM. to 3:45 P.M.

JUNE 6: Trails Day **Location:** Lake Arrowhead State Park **Time:** 10:00 AM. **This activity has been CANCELLED!** The trails are flooded and they will not be dried out in time.

JUNE 27: Great American Campout **Location:** Lake Arrowhead State Park **Time:** 7:00 P.M. Activity includes s'mores making, nature scavenger hunt and owl calling.

Congratulations! Betty Bowles

Betty, congratulations for winning the Hardin award as professor of the year at MSU. That's quite an honor and one to be proud of. Way to go, girl!!!!



Many of us tolerate the gentle giants and practice a “catch and release” policy, catching them gently so as not to snap off any appendages and watching them wobble off when set free outside. Others detest them for their “distractor factor”: tickling our shoulders, flying in front of our faces, and cluttering up our homes with bits and pieces of themselves lost in sloppy flight. Some of us even suffer from crane fly phobia, thinking they are monstrously inflated Frankensteinian mosquitoes that viciously pierce skin and suck blood. Ignorance isn’t always bliss.

Crane flies do look like gargantuan mosquitoes, but aren’t. Both are members of the same insect order, Diptera, classifying them as two- (di) winged (pteron) flies with two functional wings and two halteres, knobbed lesser wings that flap and act as gyroscopes to control body rotation. Maybe his halteres are too small for the crane fly’s big body, unable to provide him complete control. He can, however, stand on water without sinking because of the structure of fine waterproof hairs on his body.

The order is divided into a multitude of species of which 1,500 are in North America. Some species have spongy mouth parts to soak up liquids, and some have piercing/biting mouthparts, which is the major factor separating crane flies and their grubbier cousins the house flies from mosquitoes and horse flies. The crane fly can neither bite nor sting. The female’s abdomen ends in a pointed ovipositor looking suspiciously like a stinger, but it isn’t. No biting, no stinging, no problem.

Just as dramatically as they came, they’re gone. A crane fly’s adult life is tragically short, lasting two to fifteen days after hatching, depending on environment; however, it’s long enough to mate. A female gets a prowling male’s attention by crossing a pair of her six long, slender legs, shimmying her wings, which are larger than his, and winking a big compound eye. Flies’ compound eyes have many lenses allowing them to see in an almost 360 degree range, so the male gets an eyeful and is smitten. A man of few words, his actions speak louder than words. Soon the pair is locked in an embrace of sorts hazardous to fragile body parts.

You can tell male from female, if you’re interested. The male’s slender abdomen is rounded, while the female’s may be extended because she carries eggs, tapering into an ovipositor. The male’s flight pattern

is a wonky rising and falling wave of spirals, but the female’s flight is controlled and straight. After mating, the male wanders off to die as the female carefully shoots eggs out of her ovipositor into moist soil or water, depending on the species. Exhausted, she dies too. Flight periods for each crane fly species in North America last twenty-five to thirty days with different species active at different times. When the time’s up crane flies are still with us but in another form.

Eggs hatch, becoming larvae called “leather jackets” due to their brown, smooth but tough outer cuticle. With distinctive head capsules and mouths, they make up for their parents’ lack of appetite. Most adults consume nothing; but their offspring live to eat. They devour decaying wood and vegetation, shoots, and roots below ground. They will ooze out at night to eat grass, flowers, fruits, and veggies.

Our native crane larvae cause only minor damage, but the European crane fly that invaded our continent in the 1950s now lives in the northwestern U.S. and is a significant, formidable pest that destroys crop and grass roots. Over winter, eating ceases as overfed larvae doze. Between winter and spring, they find protected places and weave cocoons around themselves like do-it-yourself mummies that morph into the slender adult crane flies just in time for spring.

So what’s the point, the *raison d’être*, of these flies that don’t eat mosquitoes? You could ask the same about us, but that’s another issue. Crane flies play an environmentally important role. Their larvae decompose organic litter lying around on the bottom of streams and on forest floors, helping enrich the soil and enhancing habitats of other creatures. They’re also meals for birds, reptiles, amphibians, other insects, and fish. Because fish love them (particularly trout), they’re good fishing bait and are models for numerous artificial lures, thus enhancing the pleasure of sporty fishermen. They don’t bite, draw blood, or sting. They may be bothersome due to swarming numbers, but they’re in evidence for so little time because their lives fly by so swiftly. So what’s the point of not wanting them to exist?

When the larvae produced by the last swarm of crane flies mature and you become weary of dodging them, when a silky wing brushes your skin, try a little tenderness. It’s good for your karma if nothing more.

2015 Quail Index Study Schedule

Texas Quail Index 2015 Due Dates

Task	Start Date	Due Date	Time Management Notes
Spring Call Counts - South	April 15th	June 1st	Timeframe for sites south of I-10 only; count all mile markers once per morning; total of three mornings or three separate counts
Spring Call Counts - North	May 1st	June 15th	Timeframe for sites north of I-10 only; count all mile markers once per morning; total of three mornings or three separate counts
Dummy Nests	June 1st	July 31st	4 transects of 6 nests; all nests can be set in one day; need a total of 28 days for nest exposure (last day to set nests to make deadline is July 3rd); need three days in the field: (1) set, (2) check at 2 weeks, (3) check at 4 weeks
Camera Trapping	July 1st	August 31st	Leave cameras out for as long as possible during the 2 month window; minimum is 15 days; need at least two days in the field
Habitat Evaluations	July 1st	August 31st	One evaluation per mile marker. Can be done in one day.
Roadside Counts	Sept 1st	Sept 30th	Three separate counts; total of three mornings/evenings
Fall Covey Counts	Oct 1st	Oct 30th	Count all mile markers once; only one mile marker per listener per day; Need 8 listener/mornings (i.e. one person, eight mornings; two people, four mornings; etc.

Betty Brown Team

Alfano, Jonathon
Archibald, Cynthia
Decker, Dee
Herd, Rebecca
Hyde, Ray
Hyde, Sharon

Warren King Team

Cavett, Mike
King, Sue
Prose, Maryruth
Savage, Paula

Kay Murphy Team

Miller, Penny
Murphy, Vince
Snyder, Judy
Snyder, Larry

Jane McGough Team

Gillis, Laura
Grundy, Karen
Lunsford, Carol
Seman, Lynn

Chapter Activities for May 2015



Kay Murphy's Team setting dummy nests yesterday, May 28th for the upcoming quail appreciation days.

On May 16th, Rolling Plains Chapter members meet for advanced training at Lake Arrowhead State Park. Marsha and Cullen from Texas Parks and Wildlife lead sessions on Texas Mussel Watch and Texas Nature Trackers (iNaturalist).



FACTS
OLD
FUN

Grasshoppers have ears on their bellies. In grasshoppers, the auditory organs are in a rather unusual location – on the abdomen. On each side of the first abdominal segment, tucked under the wings, you’ll find membranes that vibrate in response to sound waves. This simple eardrum, called a tympana, allows the grasshopper to hear the songs of its fellow grasshoppers.



The common loon can dive down nearly 250 feet and hold their breath for up to eight minutes as they fish.

The male Darwin’s frog of Argentina and Chile gives birth. After the female lays the eggs, the male guards them for 20 days. Then he swallows them, and the tadpoles grow and morph into frogs inside his throat pouch. After 50 to 60 days, Daddy belches up more than a dozen baby frogs.



Invasive Species Spotlight:
Crested Floating Heart (*Nymphoides cristata*)



Crested floating heart is a freshwater floating perennial. It has stolons (runners) that aggressively root. Most of its leaves float, and are somewhat heart-shaped with purplish undersides. It produces a 5-petaled white flower on a stalk. When it’s not flowering it can be identified by its clusters of tuberous propagules that dangle from the node where the stem connects to the leaf.

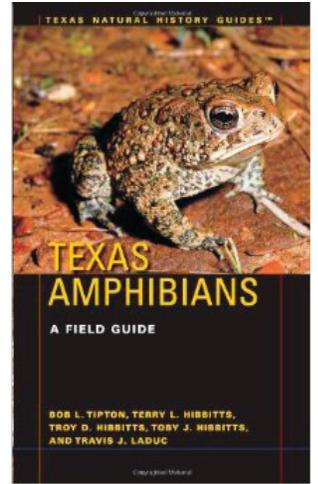
As with many floating aquatics, crested floating heart will grow rapidly, covering the surface and shading out other aquatic plants and algae, disrupting the entire food web. As it dies and decomposes it can negatively impact water quality and other species.

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RESOURCE
CORNER

Texas Amphibians: A Field Guide
by Bob L. Tipton
Paperback: 330 pages
ISBN-10: 0292737351
Price:\$14.95

Texas Amphibians is the only field guide focused exclusively on the state’s frogs, toads, and salamanders. It presents



brief, general accounts of the two orders and fifteen families. Then it identifies each of the seventy-two species in detail, including size, description, voice (if applicable), similar species, distribution (with maps), natural history, reproduction, subspecies (if applicable), and comments and conservation information. Color photographs illustrate the species.

The book also includes a general introduction to amphibian natural history, conservation, observation and collection, maintenance in captivity, museum and preserved specimens, and scientific and common names, as well as scientific keys to Texas salamanders and frogs and a generic key to amphibian larvae. This wealth of information, compiled by a team of experts who collectively have over a century of experience in field herpetology, will increase our appreciation for amphibians and the vital role they play as an early indicator of threats to the quality of the environment that we all share.

Chapter Contacts:

Jim Hensley, President 569-4713; Kay Murphy, Vice President 704-0406; Cynthia Archibald, Secretary 704-8474; Larry Snyder, Treasurer 569-4534

Committees Chairperson:

Leslie Fernandez, RiverBend Liaison 767-0843; Paula Savage, Newsletter Editor and Designer 691-0231, pasavage@sbcglobal.net; Tami Davis, Website Manager 224-0131; Activities Chair: Terry McKee 766-4097; Dian Hoehne, Communication Chair 692-7234

Advisor: Robert Mauk, TPWD Advisor 766-2383