

the *NATURALIST* newsletter

Louisiana Master Naturalists, Greater New Orleans

Message from the President

In 2023 LMNGNO members volunteered 3,748 hours at 143 events with an economic impact of \$115,220. I have a feeling we actually volunteered twice that number, but not everyone is tracking their hours. Remember, we're rewarding the person with the most volunteer hours over the year – in 2023 Liz Sigler received a gift certificate to Martin's Wine Cellar! Just in time for Thanksgiving. I'm hoping that we can continue to improve our tracking capabilities using POINT and give credit to our members for all of the great work in our community. Speaking of volunteers – this whole group is run by volunteers, from the workshop leaders to the board of directors to all of the committees, the website manager, the newsletter editor, and on and on, so a great big thank you to all of you.

A 2024 LMNGNO Annual Gathering is scheduled! Save the date: October 11-13, 2024. If you missed December's Winter Gathering, Janna Wisniewski will present a summary and slide show at the January 24th member's meeting. Thanks to the planning committee and to all of our presenters.

Do you have ideas for volunteer hours, continuing education, fundraising? Join a committee! We need your help! Sending everyone my very best wishes for this next year!

-Julia Lightner

Winter Gathering Report

The New Orleans Chapter of Louisiana Master Naturalists gathered at Bogue Chitto State Park December 1 – 3, 2023 for the first annual Winter Gathering. Between twenty and thirty naturalists enjoyed good food, wonderful outdoor experiences, and informative presentations at the group camp. The weekend started with a Friday afternoon hike led by Byron Almquist called "Reading the Landscape." Saturday and Sunday mornings began with an early morning bird walk.

Robin Pawlowski led a morning yoga in a nature session followed by a hunt for salamanders led by Bob Thomas. Ashley Glueck reported 38 species total from two eBird checklists including a nice sighting of a barred owl.

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A Bird Island Hummock, Chesapeake Bay, Delmarva Peninsula

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Winter Gathering... (continued)

Patricia Zebrick described the mission of the Wild Ones Pontchartrain Basin chapter. The afternoon featured a presentation on mushrooms led by Tres Fisher and an iNaturalist bio-blitz led by Gina Lloyd. They reported 8 observers, 91 observations, and 51 species! Top observer was Robin Pawlowski. Janell Simpson led the group in some quiet nature journaling inspired by the specimens collected during the day's adventures. Jeff Best, President of the Pontchartrain Astronomy Society talked about tools for viewing the cosmos. Sunday morning activities included "Singing in Nature" led by Shay Nicholls. Her inspired leadership was an appropriate ending to a restorative weekend among the flora and fauna of the park. A good time was had by all.

-Janell Simpson



Photo by Janell Simpson

After a potluck dinner, Byron Almquist described recreational activities in the park.

Janna Wisniewski led an artists' panel featuring Certified Master Naturalists; Kari Besharse, Courtney Egan, and Ann Plique.



Photo by Janell Simpson



Selfie by Nancy Burtchaeil

It was a very good day of mushroom hunting for Tres Fisher and his happy foragers.



2024 Events Calendar:

Board of Directors Meetings (5:30 pm)

Also open to all members in good standing

LMNGNO Resource Room
STEM Library
3011 N I-10 Service Rd.
Metairie, LA 70002

January 17th

April 10th

July 17th

October 30th

December 4th (if needed)

General Membership Meetings

Begins at 5:30pm
Loyola University
Miller Hall, Room 114

January 24th

April 17th

July 24th

November 13

Special Events

Rendezvous April 12-14
Monroe, LA
Annual Gathering Oct. 11-13
Location TBD

The Louisiana Master Naturalists of Greater New Orleans is a community of citizens interested in engaging with the natural environment through education, stewardship and volunteering.

[Visit us on the web](#)

LOUISIANA'S DUSKY SALAMANDERS

By: Dr. Robert Thomas

When I was a budding herpetologist (someone who studies amphibians and reptiles) in Alexandria, Louisiana, it was snakes, snakes, and more snakes. I noticed amphibians and other reptiles, but I only studied snakes. When I began undergraduate school at the University of Southwestern Louisiana (now the University of Louisiana – Lafayette) I was hired to manage the herpetological research collection. Suddenly, I needed knowledge and experience with a wide array of “herps.” (common term for both amphibians and reptiles). Dr. Jack Foquette was teaching a senior level herpetology course, and I attended lectures and labs. An additional opportunity was that each Wednesday evening, we attended a graduate herpetology seminar at L.S.U. taught by Dr. Douglas Rossman. Talk about a steep learning curve!

All this led to me frequently visiting various habitats and seeking herps in general. I was fascinated by their diversity, and especially interested in salamanders – defined as amphibians with a neck (as opposed to frogs), four generally equal sized legs, and a tail as adults. When I visited my hometown, my dad and I spent much time turning logs, finding and recording the herps we found, and identifying all to species – when possible. I spent the next 10 or so years trying to figure out which toads and dusky salamanders we encountered. They had confusing characters (at least for a novice) but didn’t fit the descriptions present in the commonly used field guide – *Field Guide to the Reptiles and Amphibians of the Central and Eastern United States* by Roger Conant. I’ll get to the confusing toads in a future article, but we knew that one of the most common salamanders was the dusky salamander, *Desmognathus fuscus* (at that time). Again, the duskys we found had much variation in their patterns and we felt that they needed study.

A few words are warranted about the ecology of dusky salamanders. First, the genus

occurs throughout the southeastern U.S. and has many species, some with obvious features and others, like ours, with confusing characteristics.



Photo by Bob Thomas

Catahoula or Western Spotted Dusky Salamander

Desmognathus catahoula.

They prefer very wet habitats, love to hide under moist logs, and often lay their eggs around and over clear running water so that when the eggs hatch the larvae can just slither down and drop into the water where they spend their larval period. When a log is turned revealing hidden dusky salamanders, the chase is on! They rarely just sit there; instead, they race away to hide, and their very slimy, slippery skins make them hard to capture even when initially grabbed. Searching for dusky salamanders and other species in similar habitats is a lot of fun. I’ve had the pleasure of searching for them over their range, especially in Tennessee, North Carolina, and nearby localities.

They are known to be distributed over a large portion of Louisiana west of the Mississippi River and in the northern half of the Florida Parishes. In one of the teaching collections at Loyola University I found a jar of duskys collected in 1943 south of New Orleans by renowned naturalist

Dusky Salamanders (continued)

Photo by Bob Thomas

Red salamander*Pseudotriton ruber*

Dr. Walter Moore. The collection data were expressed in a way that allowed a visit to their exact location, but none have been found. Until we can verify a population in that area, we must assume it no longer exists. BTW, these specimens will be cataloged into the L.S.U. Museum of Natural History, the state's premier curated research collection, making them available to the scientific research community.

When deciding on the direction of my educational path, I decided I wanted to do a master's level study of Louisiana dusky salamanders. One of the best universities for such studies then was Auburn University, under the guidance of the late Dr. George Folkerts. I was accepted to their graduate program, changed my mind, and followed snakes in South America – I've always regretted not spending time at Auburn as they had great professors in herpetology and a bevy of excited graduate students.

Over the years since the early 1960s, the Louisiana dusks have defied resolution, with most biologists identifying specimens as *Desmognathus auriculatus*, *Desmognathus fuscus*, and/or *Desmognathus conanti*. Further studies of morphological patterns and other characteristics did not resolve the confusion.

Recently, a nice study (Pyron and Beamer, 2023) was published that has an answer to the challenge and is being accepted throughout the scientific community. It "modernized" the analysis by using molecular, as opposed to external morphological information, in their analysis.

We now understand that all the dusky salamanders from west of the Mississippi River are a new species, *Desmognathus catahoula*, the Catahoula or Western Spotted Dusky Salamander, and those east of the river (in the Florida Parishes) are *Desmognathus conanti*, the Spotted Dusky Salamander.

Louisiana Master Naturalists of Greater New Orleans recently hosted its initial "Winter Gathering" at Bogue Chitto State Park. One of the outings included seeking salamanders in a very moist area. Two species were found, *Desmognathus conanti*, our Spotted Dusky Salamander, and *Pseudotriton ruber*, the Red Salamander. What fun discovering new elements of nature by members of the group!

What is the next step in the process of science? There will be many re-analyses – but not due to doubting the current understanding by either replicating the molecular studies to see if they get the same results or testing these decisions while other dusky salamander studies are performed. As long as the scientific community uses these names and does not challenge the study that yielded this interpretation, then these names are correct. Such is the way science works!

Literature Cited:

Pyron, R. Alexander and David A. Beamer. 2023. A systematic revision of the spotted and northern dusky salamanders (Plethodontidae: *Desmognathus conanti* and *D. fuscus*), with six new species from the eastern United States. *Zootaxa* 5311(4): 451-504.

Bird Watch at South Point - A Reverse Migration Spectacle

by: Bill Van der Meer

The weekend of November 18th and 19th, 2023 would prove to be a very auspicious event for the folks who chose to participate in a bird watch. It would find them on the flood protection levee of a northward trending peninsula known as South Point. This geographical feature juts out into Lake Pontchartrain and lies within the boundary of Bayou Sauvage National Wildlife Refuge (NWR). A 9 km wide water gap lies between it and the North Shore and is roughly parallel to the I-10 twin span and Rt 11 bridge crossings at the “pinched” southeastern end of the lake.

Led by Dr. Peter Yaukey and organized by Orleans Audubon Society (OAS) volunteers, our group was informed that we were about to witness a “reverse migration”. A what? I asked. By definition a reverse migration is a phenomenon whereby birds migrate in a direction that is atypical of their species during the spring or autumn. Over the years Dr. Yaukey has made these regular Saturday morning outings a wonderful learning experience for all who tag along. Upon arrival at South Point, folks now craned their necks skyward as a dizzying stream of song birds flew in a steady southwest to northeast direction. Across the water gap they flew, thousands of them, beaks into a 14 mph head wind with occasional gusts of 21 to 23 mph.

Yellow-rumped Warblers (*Dendroica coronata*) came in low and rose up slightly to clear the top of the levee where we stood. They were so low in fact to where you felt you could nearly touch them. Higher up and in tighter groups were American Robins (*Turdus migratorius*) and Cedar Waxwings (*Bombycilla cedrorum*). These in turn were interspersed with minor concentrations of other song birds species such as Orange-crowned Warblers and at least one magnificent Western kingbird. Accompanied by a cacophony of voices shouting out the names and number counts, the flights plodded onward oblivious to the human activity

below or harassment by the occasional falcon or accipiter, which frequent the area this time of year. Such was their apparent sense of purpose.

Saturday morning’s three hour bird ID and count was submitted to [eBird](#) by David Muth who reported that our combined effort had identified 62 species, represented by approximately 13,000



Watch area at South Point where major morning reverse movements have been recorded.

individuals. Of those, approximately 4,000 American Robins, 8,000 Yellow-rumps and 60 Cedar Waxwings made up the vast majority of sightings. Peter Yaukey and others followed up the next morning with 16,000 yellow-rumps and 220 robins sighted.

While there is significant scientific consensus about the dynamics of northward Spring migrations across the Gulf of Mexico, much less is understood about fall movements. In his 1972 publication titled “Fall Migration in Coastal Louisiana and Evolution of Migration Patterns in the Gulf Region”, Kenneth Able, describes his field research and findings at Lake Charles in southwest Louisiana, where he documented the movements of passerine (perching) birds.

Reverse Migration continued



Yellow-rumped Warbler
Dendroica coronata



Photos by David Muth

Orange-crowned Warbler
Tyrannus verticalis



Western Kingbird
Leiothlypis celata

Based on historical weather data, one of the primary assumptions within Able's research criteria was that wind patterns over the Gulf in fall were "generally similar to those of late spring and summer and usually characterized by southerly winds". His flight directional data of migratory birds supported his contention that predominant southerly winds "which favor large-scale trans-Gulf migrations in spring are opposed to such flights in fall." (Able 1972). He reported that the notable exception is when periodic post-cold-front northeasterly winds occur, which are much more favorable to large scale south to southwest flights.

His paper noted that eleven nights of the thirty four night study during the period from mid September to mid October of 1969 saw winds emanating from the east and northeast. This proved consistent with his observations of corresponding downwind bird movements to the west and southwest on those nights. Because all migratory birds generally avoid flying into a southerly headwind for long distance trans-Gulf crossings, Able noted that incidents of "reverse" migration were common under those conditions.

In his 2010 publication titled "Concentrated Migratory Morning Flight At Lake Pontchartrain, Louisiana, USA", Dr. Peter Yaukey describes a large volume of morning flights of migrant songbirds along the south shore of the lake. He noted that "*Flights have at times exceeded 10,000 birds/hr since their discovery in 2002 which ranks South Point as one of the major migratory songbird locations in the Western Hemisphere*".

Dr. Yaukey agrees with the general consensus that south/southwesterly movement still prevails after cold fronts, and estimates that "*about 10% of migrants continuing into the morning hours engage in a reverse movement that brings them to South Point instead of continuing forward.*"

Flights by temperate species were largely dominated by Yellow Warblers (*Setophaga petechia*), Yellow-rumped Warblers, Eastern Kingbirds (*Tyrannus tyrannus*), Indigo Buntings (*Passerina cyanea*), Cedar Waxwings and America Robins during their respective migratory peaks.

Interestingly, the study found that northerly winds conducive to mass movements at the lake were more common in late fall and dominated by temperate zone migrants where the Gulf constitutes the southern edge of their typical wintering ranges.

So what's behind these seemingly anomalous reverse, diurnal northward movements that occur after the passage of autumnal cold fronts?

In the discussion portion of his manuscript Dr. Yaukey describes and critiques three possible hypotheses:

1. Birds attempting to head eastward, but detour northward to avoid the open Gulf and marshes ahead to the east.
2. Migrants not attempting forward progress, but searching locally for habitat to rest or feed.
3. Birds making corrective maneuvers to account for wind drift or navigation errors.



Photo by Bill Van der Meer

Early birders watch with anticipation at South Point on the morning of October 21, 2023

Of the three, hypotheses Yaukey contends that the third scenario, “corrective maneuvers”, *“is favored in part because it has been cited as the explanation for coastal retreat movements along the Atlantic shoreline of northeastern North America including at Cape May, New Jersey (Baird and Nisbet, 1960) and in Sweden at Falsterbo, a site where diurnal reverse-directional movements are also massive in fall.”*

There has been a considerable uptick in our understanding of migratory patterns since the early to mid 1940’s. The ongoing discussion among ornithologists underscores the fact that there’s considerably more field work and research to be done. Our quests for clarity on reverse migration is often quite literally a moving target, not unlike trying to track a darting warbler in a bush with a pair of handheld binoculars.

With regards to my initial questions about the South Point phenomenon, David Muth may have said it best when he suggested I consult with an expert (modestly implying he didn’t qualify as one). But he went on to say: *“The phenomenon is widespread, with Cape May being one of the most famous examples. I think every situation is unique, but basically the idea is that when birds flying at night fly over areas that they don’t like the look of when the light comes up, they turn around and “correct”.*

Literature Cited:

ABLE, K. P. 1972. Fall migration in coastal Louisiana and the evolution of migration patterns in the Gulf region. *Wilson Bulletin* 34:231–241.

Yaukey, Peter H. 2010. Concentrated Migratory Morning Flight At Lake Pontchartrain, Louisiana, USA. *Wilson Journal of Ornithology* 122(4): 738-743, 2010



Photo by Ann Rogers at Elmer’s Island, LA

CONGRATULATIONS!!! LMNGNO Fall Class of 2023