



JANUARY 2019

Chapter News

A MESSAGE FROM PRESIDENT KRISTINE RIVERS

Happy New Year, everyone! I know that 2018 presented challenges for many of us, and I hope that you took some time to rest and recover during the holidays. I am so thankful that you have given me the opportunity to continue to serve as President and excited about everything that we will accomplish together in 2019.

I am also thankful to last year's Board of Directors for their hard work and service. A few board members have decided to step down: Carolyn May-Monie, New Class Director, who has served in various other roles throughout her membership; Peggy and Pete Romfh, Membership Directors, who also served in various other roles over the last six years; Larry Ruhr, Advanced Training Director, who served for the past two and a half years; and Richard Schaffhausen, Publicity Coordinator, who served for four years. We greatly appreciate their dedication to our chapter.

Please join me in welcoming our new Board members: John Boettiger, Membership Director; Larry Peterson, Publicity Coordinator; and Rose Wagner, New Class Representative. Bob Whitmarsh will be moving into a new role as Advanced Training Director. The position of New Class Director is still available, so if you have strong organizational and communication skills and would like to ensure that our interns have the best experience possible, let me know!

I am so proud of all of you and our chapter! Pete and Peggy report that our

members have logged nearly 18,000 hours of volunteer time and almost 1,800 hours of advanced training time in 2018. Your efforts are such an important contribution to our communities, to Brazoria County, and to Texas.

In 2019, we plan to increase our presence in both traditional and social media to spread the word about the amazing work that our chapter is doing. Speaking of reporting time, if you still have hours to log, please be sure to do so soon, as TP&W will be performing their year-end review well before the 45-day deadline for entering hours.

Are you ready for "A Little R&R (Research & Resource Management)"—our January 26th Advanced Training event? I encourage you to register now if you haven't already done so, as we will open registration to members of nearby chapters in a couple of days. In addition to a fun day of presentations and interesting displays, there will be great food, and we're again providing it all free of charge.

I look forward to working with you again in 2019. We're introducing some exciting new programs and volunteer opportunities, and I can't wait to share them with you.

Kristine Rivers is the president of the Cradle of Texas Chapter. She can be reached at rivers@tmn-cot.org.



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The Texas Master Naturalist program is coordinated by the Texas A&M AgriLIFE Extension Service and the Texas Parks and Wildlife Dept. Texas Master Naturalist programs serve all people without regard to socio-economic level, race, color, sex, disability, religion, age, or national origin.

Masthead photo by Peggy Romfh.

Texas Master Naturalist Program
Cradle of Texas Chapter
Chapter News – January 2019

LAST CHANCE TO REGISTER
TMN-COT Bonus AT Day
Saturday, January 26

Register: <http://tmn-cot.org/Advanced/BonusAT-2019/index.html>



Texas Master Naturalist Program—Cradle of Texas Chapter
General Meeting and Advanced Training
Wednesday, January 9, 2019
Texas AgriLIFE Extension Building
21017 County Road 171
Angleton, TX 77515-8903

8:30 AM – 9:00 AM	Fun and Fellowship Morning Snack Team: Christina Hartman, Ellen Lasseter, Michael Lasseter, Ruby Lewis, Candace Novak, and Lorna Witt
9:00 AM – 9:40 AM	General Membership Meeting <i>This meeting is approved for 1.00 hour volunteer time</i>
9:40 AM – 10:00 AM	Nature Notes Speakers: Chris Kneupper and Robert Salzer Topic: Rare and Specialty Oaks of Brazoria County
10:15 AM – 12:00 PM	Advanced Training Speaker: Joy Columbus, Vice President, Horticulture Houston Botanic Garden Topic: Creating Houston's First Botanic Garden <i>[Hours for Advanced Training (AT) TBD at close of meeting]</i>



Joy Columbus is the Vice President of Horticulture at the Houston Botanic Garden (HBG). Joy leads the effort to articulate and develop the Houston Botanic Garden's horticultural program, build the horticulture team, and oversee plant conservation and landscape management. "With more than 20 years of experience, Joy will be an asset to our growing team," said Claudia Gee Vassar, HBG president and general counsel; "Her wealth of knowledge and proven track record will be vital in making Houston Botanic Garden a world class, iconic destination."

Joy has previous experience working with the New York State Office of Parks and Cleveland Botanical Garden and served as a research assistant at Miami University of Ohio. She received a Master of Science in biology from John Carroll University and holds a Bachelor of Arts in botany with an environmental emphasis and a minor in horticulture. Joy works with the Houston Botanic Garden's local, state and national partnerships to build unique plant collections and create awe-inspiring gardens that will delight and inspire visitors.

Houston Botanic Garden, artist's rendering
<https://tinyurl.com/HBG-Rendering>

Membership Data Report by Pete and Peggy Romfh, Data Managers

Congratulations to those receiving awards at the COT January 2019 General Meeting:

Initial Certification Achieved (TMN Pin)

Debbie Nance	Regina Tippet
Jim Nance	Rose Wagner
Mary Schwartz	Taylor Wilkins

Recertification 2018 (Ocelot Pin)

Julia Geisler
 Mary Helen Israel
 David Plunkett
 Regina Tippet (2018 Intern)

500 Hours Milestone (Silver Dragonfly Pin)

Jimmy Salinas
 Robert Salzer

1000 Hours Milestone (Gold Dragonfly Pin)

Karen Leder

Impact Data—January 1—December 31, 2018

14,624 Adults 35,384 Youth 50,008 Total

Hours Totals—January 1—December 31, 2018 ¹

17,527 Hours VT 1,767 Hours AT 107 Volunteers

¹ 2018 hours may be turned in until February 15, so totals may increase.



Above: At the December 2018 General Meeting held at the AgriLIFE Building in Angleton, President Kristine Rivers (left) and Secretary Lisa Myers presented Mike Mullenweg with a 2018 recertification pin. Not pictured, Mary Holler. **Right:** Kristine presents Dick Schaffhausen with a 2500-hours-milestone pin.



Above: 2018 AT Director Larry Ruhr (left) and Kristine present John Boettiger with a certificate for completing Texas Waters Certification. Photos by Dick Schaffhausen (top and bottom) and Neal McLain.

Seed Size Matters from The New York Times, Jan. 30, 2018

Q Why are some seeds huge, while others, which may produce similar-size plants, are tiny?

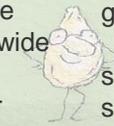
A Many reasons for a disparity between seed size and plant size have been suggested, and many aspects of plant development are thought to be related to seed size. Larger seeds are better able to support themselves initially, while smaller seeds have a better chance for dispersal over a wide area, helping at least some seedlings survive.

Plants also have evolved different adaptations to their sprouting environments, helping some smaller seeds thrive in

drier, less nutritious soils, while larger seeds often take advantage of richer soils that hold water better.

Seed size is often related to relative growth speed; smaller seeds develop more quickly. But not always: One study concluded that small-seeded species only sometimes possess additional adaptations for rapid growth over and above their general size advantage.

A 2017 study found that a faster speed of evolution of new species in a broad range of plant types correlates with smaller seed size. Small-seeded plants also tended to have shorter life spans, with the rapid turnover linked to more rapid evolution.



Nominating Committee Report

The following chapter members were elected for calendar year 2019 at the December 2018 General Meeting:

- **President – Kristine Rivers**
- **Vice President – Bill Ahlstrom**
- **Secretary – Lisa Myers**
- **Treasurer – Donald Sabathier**

These officers assumed their positions at the end of the December 2018 General Meeting.

Other board members are appointed by the President. Their photos and titles appear at right.

Continuing to serve on the board will be permanent members John O’Connell, COT’s adviser, and Dave Brandes, the immediate past president (see photos below).

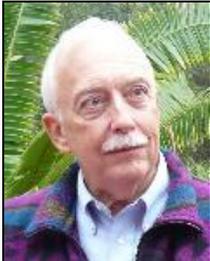
ELECTED MEMBERS of the BOARD

			
Kristine Rivers President	Bill Ahlstrom Vice President	Lisa Myers Secretary	Don Sabathier Treasurer

APPOINTED MEMBERS of the BOARD

			
John Boettiger Membership Director	John O’Connell Interim New Class Dir.	Neal McLain Communications Director	Ruby Lewis Outreach Director
			
Bob Whitmarsh Advanced Training Dir.	Oron Atkins Volunteer Service Dir.	Pam West Chapter Host	Rose Wagner Class of 2018 Representative
			
Connie Stolte State Representative	Ed Peebles Speakers Bureau Coordinator	Larry Peterson Publicity Coordinator	

PERMANENT MEMBERS

	
John O’Connell Chapter Adviser, Texas A&M AgriLIFE Extension Service	Dave Brandes Immediate Past President

Pete and Peggy Romfh have chosen to step away from the board as Membership Directors, but they will continue to serve as Data Managers, overseeing VMS data for the chapter.



TMN-COT Photo Gallery Will Transition to iNaturalist

by Peggy and Pete Romfh

Texas Mid-Coast Nature Gallery

A series of nature images from the Texas Mid-Coast including Brazoria, Fort Bend, Galveston, Jackson, Matagorda, and Wharton Counties.



After seven years on one repository, the COT Photo Nature Gallery will start a transition to a much larger photo and data repository on i-Naturalist.

Up until 2012, a small, HTML-driven product was used to document about 200 species of animals, primarily birds and insects, on the COT web site. As new COT members, we agreed to take on the task of managing the nature photos and decided to use a software program called Photo Gallery.

Since then, COT members have contributed 3,548 images of over 1,100 species along the Texas Mid-Coast. Most are from Brazoria County. The site has been accessed over 114,500 times as naturalists and others seek to clarify or learn about species they have seen.

Although the Photo Gallery software still works, it is no longer supported by the vendor, so we decided to leave it as a static reference and start using iNaturalist to document species instead. About 400 species from Brazoria County have already been added to iNaturalist.

Explore or Contribute to iNaturalist

If you do not want to contribute photos to iNaturalist but would like to use it as a reference, go to www.inaturalist.org and explore species—by county or location.

Better yet, consider creating your own login to keep track of species that you have seen. There is an iNaturalist app that can be loaded onto your phone or iPad that will allow you to upload photos quickly.

The version of iNaturalist on your computer has more features and is easier to use if you are, like us, camera buffs who prefer to edit photos before uploading them.

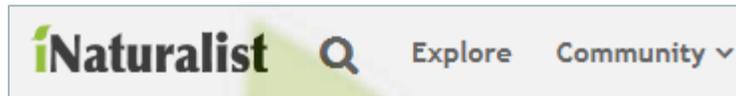
The iNaturalist program allows you to track all the species you have added, to connect with experts who can help identify the organisms you observe, and to provide a data

source for scientists and researchers.

Chapter member Mike Mullins has been using iNaturalist for a couple of years. He particularly likes the fact that experts from all over the country comment and help with species ID. He sees it as a great learning opportunity to build on his own knowledge and to help others learn about nature.

Continued on next page

TMN-COT Photo Gallery Will Transition to iNaturalist *continued*



iNaturalist COMMUNITY/PROJECTS

Every photo that you add to iNaturalist can be linked to one or more projects. Projects are a way to group or pool photos into particular species, dates, or locations. You can create a project for a BioBlitz or nature event or join other projects that already exist. Projects are the way to go to see a subset of photos related to a specific topic.

Some of the projects that we have joined are:

- Arachnids and Myriapods of North America
- Beach Finds and Washashore
- Beetles of Texas
- Crabs of the World
- Drift Seeds and Sea Beans
- Freshwater Amphipoda of North America
- Gulf Cost Banded Birds
- Herps of Texas
- Lepidoptera of Texas
- Rare Plants of Texas
- The Insects of Texas
- TNC Nash Prairie Preserve
- All Texas Nature
- Arachnids Found in Texas
- Bees and Wasps of Texas
- Birds of Texas
- Crustaceans of Texas
- Fishes of Texas
- Freshwater Crustacea of North America
- Gulf of Mexico Biota
- Texas Seashells
- The Reptiles of Texas
- USFWS National Wildlife Refuge System

Note: Posting pictures to Projects will also help in getting your observations identified because the subject-matter experts usually concentrate on their specialty instead of “what is this?”

iNaturalist COMMUNITY/PEOPLE

Want to see some of the photos various COT members have posted? Look under ‘People’ and search for the member’s name or iNat logon.

Some COT members who have already posted on iNaturalist are:

- Mike Mullins (mcm)
- Chris Kneupper (ckneuppe)
- Susan Conaty (susanconaty)
- Pete Romfh (wprnaturephotos)
- Peggy Romfh (pcrnaturephotos)
- Kristine Rivers (kristinerivers)

iNaturalist RESEARCH GRADE

When you post a photo on iNaturalist, also provide a suggested ID. Then others in the community can agree or disagree and suggest something different. When two thirds of people who review a photo agree on an ID, and location and other information has been provided, the post is flagged “Research Grade.”

iNaturalist FOLLOW OR SUBSCRIBE

With 15 million photos on the site, iNaturalist can seem overwhelming at first.

A couple of features that help users focus and look only at the most relevant topics or people they are interested in are:

- **Follow**—This feature allows you to ‘follow’ all the photos a particular person posts. For example, if I follow Mike and Chris and Susan, then every time they post photos, I will get an email the following day with a thumbnail of what they have posted.
- **Subscribe**—If you want to see all the photos for a particular location, e.g., Brazoria County or Brazoria NWR, then you can subscribe to these locations. Again, every time someone posts photos that come from these locations, you will be notified in your daily email update.

Both tools are a great way to stay in touch to see what fellow naturalists or the community is seeing in your favorite locations.

*Another benefit of iNaturalist...
Research-grade photos are accessible to scientists for further study.*

Winter in the Refuge by Peggy Romfh

Winter at the San Bernard National Wildlife Refuge always delights—whether it is the sight of hundreds of ducks enjoying Moccasin Pond or the glorious bursts of red berries peeking out among trees along the auto route.

After a summer of drought and a pond reduced to dried mud, Moccasin Pond is now filled with water as far as the eye can see. The primary species enjoying the shallow water are American Coots and Northern Shovelers, but Blue-winged Teal, Lesser Scaup, Common Golden-eye and other species may also be seen.

WINTER LEAVES: Yaupon Holly (*Ilex vomitoria*)



NO LEAVES: Possumhaw (*Ilex decidua*)



Yaupon Holly (above left) is a native, evergreen shrub (small tree) that produces large numbers of bright-red berries. According to www.wildflowers.org, the leaves and twigs contain caffeine, which American Indians used to prepare a tea. After drinking the tea in large quantities ceremonially, they vomited it back up, which is how the plant got its species name, *vomitoria*. The vomiting was self-induced or due to the addition of other ingredients; the leaves don't actually cause vomiting.

Unlike Yaupon Holly, Possumhaw holly (above right) is deciduous. With its many small, red berries found along leafless, gray twigs, it is conspicuous in winter along roadsides and in woods. Opossums, raccoons, other mammals and songbirds eat the fruit of both species. I once saw a flock of Cedar Waxwings devouring the fruit from a cluster of yaupon trees. It was a memorable sight.

Northern Shoveler (*Spatula clypeata*)

The large, shovel-shaped bill on this male Northern Shoveler (below left) has a huge chunk bitten off the end, likely from a predator.



Taking a break from foraging head-down for aquatic invertebrates and seeds, this female (right) is busy preening in shallow water along the edge of Moccasin Pond. Her oversized orange bill and orange legs are distinctive. Photos by Peggy Romfh.



Wild Wonderings: Texas Quail Index 2018 Summary



A male and female bobwhite pair.
Photo courtesy of TPWD.

The end of 2017 had quail enthusiasts across the state of Texas holding their breath. Years 2015 and 2016 had been remarkable for quail, with record numbers heard, seen and hunted, and the highest values yet recorded

in the Texas Quail Index monitoring program.

While 2017 wasn't a bust by any means, we saw a levelling off of the meteoric rise in quail numbers in many parts of the state. High carryover from the preceding years ensured that there were still plenty of birds around at the start of hunting season, but it felt like our rollercoaster was nearing its apex and preparing to plummet.

By several accounts, that's exactly what happened. Texas Parks and Wildlife's longstanding quail-monitoring program, which includes 14 years of roadside-count data (Fig. 1), reports a nearly 80% drop in bobwhite sightings this year versus last year in the Rolling Plains (average of 26.72 birds seen per route in 2017, 5.43 in 2018). Scaled quail fared worse, with counts falling more than 90% this year in the same ecoregion (average of 3.67 birds seen per route in 2017, 0.30 in 2018). The Rolling Plains Quail Research Ranch has also reported disappointing trapping numbers and a lack of quail this hunting season.

Quail Index Roadside Count Data (Fig. 2) show similar trends. While data collection efforts in some areas were once again hampered by (much-needed) rain, we saw a drop in average bobwhite counts from 1.36 birds per mile in 2017 to 0.38 birds this year. Among cooperators in scaled quail country—namely the Edwards Plateau and Trans Pecos ecoregions—the “blues” appeared to weather the bust better with numbers even increasing slightly from an average of 1.29 birds per mile in 2017 to 1.36 this year.

Roadside counts are typically conducted in late summer, but the TQI begins monitoring quail populations in the spring (April/May) with call counts. Judging by call-count data alone, it seemed like quail populations might have stabilized after all. Counts for both species were about on par with 2017, averaging slightly higher for bobwhites (3.4 roosters per mile marker this year, 3.1 last year) and slightly lower for scaled quail (1.5 this year, 1.8 last year). This is likely attributable to the holdover from the previous year.

While some parts of the state, such as the panhandle, were already experiencing severe drought conditions

during this time, the dry spell wouldn't really take its toll on most Texas quail country until the summer, i.e., peak quail-breeding season.

The disparity between call count and roadside count numbers suggests that quail faced serious challenges over the summer. One of the ways that the Quail Index attempts to gauge breeding-season challenges is through the use of “dummy nests”—stand-ins for quail nests, constructed using three chicken eggs, which can be monitored to estimate rates of actual nest predation. This year, dummy-nest survival rates were the lowest they've ever been for the TQI, averaging only 41%. While it may seem defeatist to mark a >50% success rate as satisfactory, quail nests experience such naturally-high rates of predation that anything above 40% is generally considered acceptable. However, the change relative to last year (average dummy nest survival was 49% in 2017) may be worth paying attention to. Some of this might be attributable to human factors, such as differences in volunteers or cooperating properties, but it's also possible that it's a symptom of increased predation pressure or reduced habitat quality.

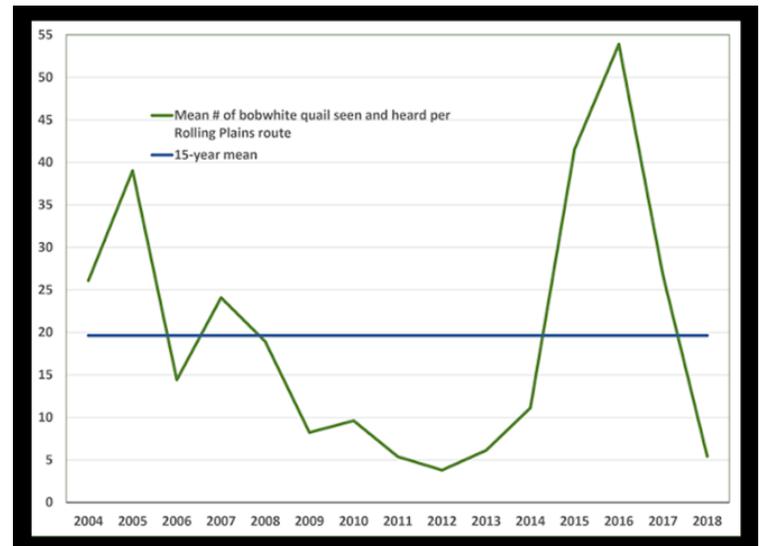


Fig. 1: Bobwhite roadside counts in the Rolling Plains dropped starkly this year. Graph from the [TPWD 2018-19 Quail Forecast](#).

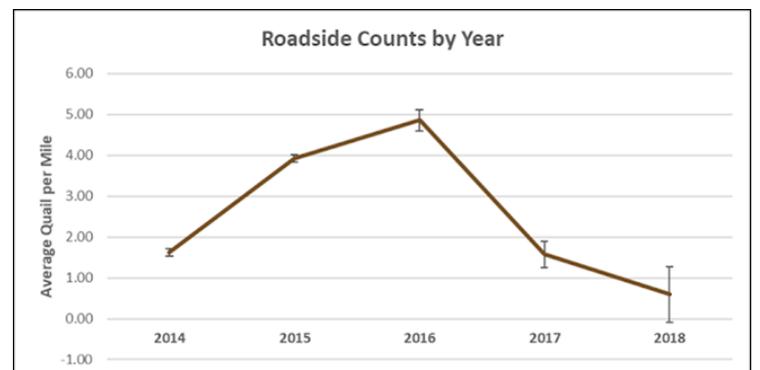


Fig 2: Roadside count results for the 2018 Texas Quail Index. Error bars represent standard error of the mean.

Continued page 10



HOLIDAY CELEBRATION
 WEDNESDAY, DECEMBER 12, 2018
 12:00 PM – 4:00 PM
 (Following General Meeting and Intern Presentations)

AGRILIFE BUILDING

MENU
 Sage-rubbed and Smoked Wild and Domestic
 Pork and Barracho Beans
 à la Marty and Roy

PLEASE BRING
 Appetizers
 Sides
 Desserts

NO ALCOHOLIC BEVERAGES, PLEASE



Row 1: Leo and Candace Novak; Herb and Jo Myers; Roy Morgan and Kim Richardson; **Row 2:** Pam West; Connie Stolte; **Row 3:** Joycelyn Grigson's festive 2019 dues wreath; Don Sabathier; **Row 4:** Larry Ruhr and Ed Peebles; Michael Gras (TMN East Texas Chapter) and Dick Schaffhausen; Jimmy Salinas and Tom Morris; **Row 5:** Becky McClendon and Chip Sweet; Joan Simonsen, Neeta Allen and Julia Geisler; Phil Huxford and Bob Whitmarsh. Photos by Neal McLain.

Holiday Celebration *continued*



Clockwise from top left: 2018 Intern Class members Mary Schwartz, Mike Hampy, Jim Nance, Debbie Nance, Regina Tippett, Catherine Sweet, Kristin Plunkett, Howard Allen (intern project mentor), Brenda Martin, with chef Marty Cornell; Kristine Rivers and Bill Ahlstrom; Lisa Myers and Neal McLain; Mike Bettorf and Joycelyn Grigson. Photos by Neal McLain.

Wild Wonderings: Texas Quail Index 2018 Summary *continued from page 8*

The TQI includes protocols for monitoring predators as well, using eggshell evidence from dummy nests and game cameras. In the case of nests, the two most commonly-identified predators were raccoons, which have a tendency to tear shells into large chunks, and coyotes, which typically crush shells into tiny fragments. These two together made up more than half of our “candidates of destruction” for dummy nests. Game camera evidence suggests that one nest predator may be underrepresented, however: feral hogs. The number of hogs caught on camera rose dramatically this year (199), more than doubling last year’s count (72) and totaling more than coyotes and raccoons combined (83 and 85, respectively). Overall, we saw more total predators photographed this year but less species diversity, with feral hogs dominating the counts.

The TQI’s habitat evaluations further clarify why quail may have struggled this summer. These scores have always trended high, with properties rarely falling below the “good” or “excellent” ranges, but our average, overall Evaluation Value this year—0.62—was the lowest it’s been over the course of the Index. That score follows precedent and places in the “good” category, but the limiting factors that contribute to it

are a departure from the norm. “Limiting factors” are aspects of the habitat that restrict its usability for a species (bobwhite or scaled quail in this case) and nesting cover has almost always been limiting. This year however, the most significant factors were availability of food and diversity of woody cover species, both of which may have been exacerbated by lack of rain.

In short: It looks like we’ve finally hit a bust. Some may find this disheartening after the great resurgence of 2015 and 16, but it’s important to remember that boom and bust cycles are simply how quail populations operate. Ups and downs are normal, and even the most expertly-managed, quail-friendly properties will have them. Data collection and continued monitoring are just as important in bust years as they are in boom years, as we learn which conditions produce fewer birds and maintain long-term data sets to detect trends over time.

Source: <https://tinyurl.com/WW2018quail-index>

Written by Amanda Gobel, Extension Associate, Texas A&M Natural Resources Institute. Edited by Dr. James Cathey, Associate Director, Texas A&M Natural Resources Institute.

Cradle of Texas Chapter Board

President	Kristine Rivers, Pearland
Vice President/Programs	Bill Ahlstrom, Angleton
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Treasurer	Donald Sabathier, Pearland
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Immediate Past President	Dave Brandes, Lake Jackson
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Membership Director	John Boettiger, Lake Jackson
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Chapter Advisor	John O'Connell, AgriLIFE Extension Service
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Newsletter Contributors	Neal McLain (Chief Reporter, Editorial Advisor), Kristine Rivers, Peggy & Pete Romfh
Website	http://tmn-cot.org
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E-mail Listserv	http://tinyurl.com/TMN-COT-Mail



Master Naturalist Email Lists

TMN-COT Chapter list

- Instructions http://tmn-cot.org/Email_Lists/index.html
- Send messages to TMN-COT@googlegroups.com
- Message Archive <http://tinyurl.com/TMN-COT-Mail>
- All messages are sent immediately.

State Master Naturalist list

- Instructions <http://txmn.org/staying-connected/sign-up-for-tmn-listserv/>
- Subscribe listserv@listserv.tamu.edu
- All messages are held for moderation by the TMN State Coordinator.

Chapter News is published monthly on Monday before the General Meeting by the Texas Master Naturalist Cradle of Texas Chapter. Submissions are welcome; submission deadline is 5:00 PM on Thursday before the General Meeting. Send submissions by email to *Chapter News* Editor at news@tmn-cot.org. Submissions may be edited for clarity and spacing.