



The Newsletter of the Golden Triangle Audubon Society

Vol. 29 No. 4

April 2023

Membership Meeting Thursday April 20, 2023 7:00 p.m. Garden Center, Tyrrell Park, Beaumont

Whooping Cranes of the Gulf Coast: Where two Populations Survive and Thrive

Madi Radford **International Crane Foundation**

The Gulf Coast is home to two populations of Whooping Cranes – the migratory Aransas Wood Buffalo Population, which breeds in Canada and winters in Texas, and the Louisiana Non-Migratory Population, a reintroduced flock that mostly stays in Louisiana year-round. As both populations continue to grow and expand their range, International Crane Foundation is working to broaden its outreach to include communities that may begin to see more and more cranes in the coming years. The talk will cover the past, present and future of Whooping Cranes along the Gulf Coast.

Madi Radford is the Whooping Crane Outreach Assistant for the International Crane Foundation. She works in Texas and Louisiana doing outreach to individuals of all ages in communities that share the landscape with Whooping Cranes. Originally from North Carolina, she currently works out of Baton Rouge, LA. Her interests include birding, botany and conservation ecology.

We plan to have the doors open no later than 6:00 p.m., the meeting will start at 7:00 p.m. sharp.

The Brown Pelican

Vol. 29, No.4 April 2023 Issue number 293

> Golden Triangle Audubon Society

Web Site for more information www.goldentriangleaudubon.org

BOARD OF DIRECTORS (2023)

President Christine Sliva

Treasurer Harlan Stewart

Secretary John Whittle

Directors-at-Large

Girish Doshi Gerald Duhon Sherry Gibson John Haynes Sheila Hebert Thomas Hellweg Gary Kelley Steve Mayes Dana Nelson

COMMITTEE CHAIRS

Program Jana Whittle **Field Trips** Steve Maves Conservation Gary Kelley Membership, Publicity Denise Kellev Education Volunteer needed Webmaster Jeff Pittman (geojeff@geojeff.org) **Facebook Administrators** John Mariani Jana Whittle Newsletter Editor John Whittle (gtaudubon@aol.com)

The Brown Pelican is

published monthly except July by the Golden Triangle Audubon Society, P. O. Box 1292, Nederland, Texas 77627-1292 email: gtaudubon@aol.com

Calendar of Events

Important Note: Field Trip notices published here are subject to last minute changes especially in the current Covid-19 situation. Changes will always be posted on the web site at www.goldentriangleaudubon.org.

FutureProgramsandFieldTrips.(All eventsareTENTATIVE!).Thelatestinformation is always availableon theweb site at goldentriangleaudubon.org.

Thursday April 20, 2023. Membership Meeting. See page 1 for details.

Saturday April 22, 2023. Field trip to Sabine Woods.

This trip will look for Neotropical migrants at the height of spring migration. We will assemble at Sabine Woods at 7:30 a.m. (You should be able to find the group if you are unable to be there quite that early.)

See the nearby note about current and future expansion at the Woods. We have portable toilets available at the entrance during spring migration, but even with an increased number this year, there may not be as much capacity on April weekends as would be ideal!

This trip involves relatively easy walking on the trails at Sabine Woods to look for migrant songbirds, although another option is to sit at one of the drips and wait for the birds to come to you. The trails may be muddy and slippery if it has rained in the prior day or two. Armadillos and feral pigs have been very active, so there will be holes to avoid! There is a \$10 sanctuary pass donation at Sabine Woods for those who are **not** members of Golden Triangle Audubon or TOS.

Great Texas Birding Classic Big Sit.

Date to be determined (in Apr 15-May 15 period. See web site.) The "Big Sit", part of the Great Texas Birding Classic, is a yearly event/competition sponsored by Texas Parks and Wildlife. It is conducted in a 50-ft diameter circle from which to bird in a 24-hour period. Birds must be identified by sight or sound from within the circle. This years' event is being sponsored locally by the Beaumont Convention and

Visitors Bureau and will take place at Cattail Marsh.

Saturday May 13, 2023. Spring Migration Count. On International Migratory Bird Day, we undertake an all-Jefferson-County Bird Count. We have been doing these counts since 1995, so they have become a valuable way to monitor changes in local bird populations. The Migration Count/ International Migratory Bird Day is the second Saturday in May. The count attempts to cover as much of Jefferson County as is reasonably possible. We will welcome birders at the intermediate level and higher, especially if you are able to count in the early morning from dawn through about 11:00 a.m. It is not necessary to commit to the whole day. If you have special access to any areas within the county, we would appreciate your help! Contact John Whittle (gtaudubon@aol.com or 409-722-4193) for further details or offers to help.

Thursday May 18, 2023. Membership Meeting. Your favorite bird pictures. Full details next month.

Saturday, May 20, 2023. Field Trip to Hardin County. This is a great opportunity to see the breeding songbirds of the southern part of the Big Thicket. We will focus on the area north of Silsbee to look for the breeding birds of the area. This is typically a half-day trip. We plan to look for the nesting species of the area - Pine, Swainson's, Hooded, Kentucky, Prairie, Prothonotary, and Swainson's Warblers, Yellowbreasted Chat, White-eyed, Red-eyed and Yellow-throated Vireo, Indigo and Painted Bunting, Gray Catbird, Summer Tanager, Acadian Flycatcher, Brownheaded Nuthatch and others. We will likely not find all the listed species, but most years we find a good selection of them. Swainson's Warbler is a particular target of this trip, and we have often been rewarded with excellent views of this normally very secretive species on this field trip. This area is also one of the easiest places to find breeding Warblers, Prairie typically in plantations of about 20-foot-tall young pines. Usually, we bird Gore Store Road east as far as Beech Creek, Firetower Road, and Matigwa Road.

The Whooping Crane that was resident in West Jefferson County

The Louisiana Department of Wildlife and Fisheries has released the following information about the Whooping Crane that was until recently resident south of Highway 73 in west Jefferson County.

"Last Tuesday (March 14) we caught the female Whooping Crane, identified as L14-17, in Jefferson County, TX and took her back to Louisiana, where she was released on White Lake Wetlands Conservation Area property. Sadly, she had lost her mate last summer but never made an attempt to return to LA, instead remaining on and near the territory she had occupied with her mate. Unfortunately, there were no other whooping cranes in the area so she had no chance of finding a new mate. The capture, transport, and release all went well and we are thrilled that on Tuesday March 21, just a week after releasing her back in LA, she was found with LW5-21, a two-year old male that was hatched and reared in Acadia Parish. He is still young but they did unison call together and she was quite fired up and displaying some reproductive, breeding season behavior when we caught her so we're hopeful this will be a good match and this new pair will remain together.

"A huge thank you goes out to the landowners and farmers in Jefferson County, TX who 'hosted' her and her previous mate for the last several years and for allowing us access to their properties so that we could catch her and give her this new opportunity. They were sad to see her go but understood it was the best option for her and we are grateful for their cooperation and support!"

Sabine Woods Developments/ Work Day

On Saturday March 25, we held our spring work day at Sabine Woods. The 24 volunteers constituted a record turnout, and the Woods are (almost) completely ready for spring migration. Texas Ornithological Society (TOS) and Golden Triangle Audubon thank each and every one of them: Andy Allen, Michael Cooper, Howard Davis, Liz Dennis, Ashley Fuselier, John Haynes, Thomas Hellweg, Greg Jackson, Johnnie Johnson, Denise and Gary Kelley, Steve Kuritz, Steve Mayes, Andrea and Jim Nauman, Frank Ohrt, Greg Reynolds, Sherrie Roden, Dania Sanchez, Charles Shelton, Christine Sliva, Harlan Stewart, Jana and John Whittle.

This last week was the busiest in all the time that I have been managing the Woods. At the beginning of the week, TOS signed a lease for two tracts: the 7.6 acre tract to the west of the property and the 6.2 acre tract to the east. The west tract has two rows of oaks that are now apparently about 50 years old and promise to be a good place to find the high canopy species during spring migration. We plan to develop appropriate understory, and also to plant a good number of live oaks in the currently open area to the north of the rows of oaks. The east tract, which many years ago was a satellite dish farm for Time Warner (as it was then known), is planned to become a parking area for Sabine Woods visitors. This will eliminate the current rather dangerous situation in which visitors have to walk along the edge of Highway 87 after parking along the roadside. The two new tracts were immediately brush-hogged, and installation of necessary fences and gates should be completed by the time you read this. Each leased tract will be accessible this spring from the

TOS owned Sabine Woods property. There are still a few things to complete including signage. Gravel to prepare the parking lot has not yet been secured.

In Sabine Woods itself, the sides of the trails were trimmed of branches and vegetation to keep them open through the spring. A large number of armadillo-created holes were filled in and levelled. The edges of the open areas were mowed, but this year, since these areas were not at all overgrown, the interiors of the areas were left so that they may be more attractive to ground-dwelling migrants. Time will tell how successful this proves to be. Considerable amounts of poison ivy were treated to eliminate this hazard. Trash was collected and removed. Numerous other tasks were dealt with.

John A. Whittle

Pleasure Island Bird Blind

Pleasure Island features a brand-new lakeside bird blind. The Greater Port Arthur Chamber of Commerce will host a ribbon cutting at 11 a.m. Monday, April 10. Bring your binoculars!

The blind features waterside views while hidden from Port Arthur's bounty of birds. The wooden blind is situated near the base of the golf ball water tower on the island. Park and walk a short distance to the wooden blind which features seating and viewing spaces so viewers stay.

There are numerous mulberry trees in the vicinity, so the area has the potential, especially in April, to attract many fruit eating species such as tanagers, orioles and grosbeaks. In addition, the larger trees round the pond should attract insect eaters such as the warblers that are the main attraction in the migrant traps in our area.

27th Annual Birding Classic

The 27th Annual Birding Classic is fast approaching. This is the biggest, longest, birdwatching tournament in the U.S. It is a yearly event/competition sponsored by Texas Parks and Wildlife. The event promotes birding while documenting species across the state.

There are several categories. We will be participating in The Big Sit and are in the process of putting a team together consisting of 20 participants. Teams select a 50-foot diameter circle from which to bird (NOTE: THIS IS A MODIFICATION TO ALLOW FOR SOCIAL DISTANCING). Team members can rotate in shifts or can be the same members all day. Birds identified and counted may be inside or outside of the 50' circle, but they MUST be seen/heard by a team member from WITHIN the circle. This is up to 24 hours in a single day (midnight to midnight)

Tournament Dates: April 15 to May 15 allows each team to select a day for optimal migratory birds. Date will be announced on the GTAS web-site.

Location: Sabine Woods; Team Name: Visit Beaumont Texas

For more info, contact Christine Sliva 409-782-1832 <u>csliva20@windstream.net</u>

Using Weather Radar to detect birds

The digital version of this issue has, as a supplement, an article by Dr. Sidney Gauthreaux, who was largely responsible for developing the technique, about how to detect migrating birds on publicly available weather radar images.

Fall 2022 Migration at Sabine Woods

The tabular data that is at the heart of this compilation is presented as a supplement to this issue (after p8) It is also available on the web at www.goldentriangleaudubon.org To access this there, go to the Newsletters tab and select the April 2023 issue. An alternative table of the number of days on which a species was reported is presented here. It does not, however, give information on the numbers of birds each day, as shown in the supplement.

We try each year to present a listing of the migrants seen at Sabine Woods during both the spring and fall migration. Increasingly, records are entered by the observer into Cornell Lab of Ornithology's eBird program. Cornell makes these observations available to researchers in digital form eliminating the need to reenter all the records. Our compilation is derived from the eBird reports with only a very few observations that were not entered into eBird added.

Methodology

We employ a methodology unlike that used anywhere else that we are aware of, that attempts, to the extent practical, to exclude duplicate sightings of the same birds on the same day. The base data set is provided by eBird and includes all sightings that have passed the eBird review process. However, the eBird filters can only be set at a county level, and there are some species easily found in the northern part of the county that do not come as far south as Sabine Woods but do not show up as rare on eBird. We require details for any such species. Each day, we first consider the highest number of any species reported on that day. We then review other reports for that day, and evaluate whether that number is reasonable in light of the numbers reported by other experienced birders, especially those familiar with the area. In most instances, a species reported by only one observer on a day when there are many reliable birders submitting checklists requires some corroboration such as a good description or an identifiable photograph. It should be noted that this methodology will count a bird present over several days once each day. No doubt there are many instances when birds remain overnight and are counted on two or more days, but we have no way of even estimating the "duplicate counting" that results.

We are grateful to all those who entered their sightings into eBird, especially those who birded the Woods on many days: John Haynes, and Steve Mayes. A complete listing of the observers whose eBird checklists were reviewed is included in the digital version of this article.

Review of the Season

The Atlantic hurricane season in 2022 spared the Gulf of Mexico from any significant problems. Indeed, it was a somewhat unusual season in many ways. For the first time since 1997, there were no named storms in August. There was one storm in the Gulf of Mexico that remained in the Gulf of Campeche. The most damaging storm of the season was hurricane Ian that hit Cuba and then Southwest Florida on September 27-28. Although not particularly unusual, there were several episodes of Saharan dust crossing the Atlantic,

and this tends to inhibit the formation and development of tropical systems.

Although fewer birders are active during fall migration than spring migration, we have reports from most, but not all days in the season. Although the value of our analysis lies more in the numbers of the species that are seen every year, there is always interest in the unusual species that are recorded. Pride of place this fall goes the identification of the Red-legged Honeycreeper on October 16 and its staying until October 27 that led to an unprecedented 245 checklists listing this bird being submitted to eBird. This was one of a number of individuals of this species that were seen in the US this fall, as described on page 5 of the November 2022 *Brown Pelican*. (Available on the Golden Triangle Audubon website.)

Next in line among the rarities was probably the male Tropical Parula, first seen October 15, and remained until October 30, providing an added bonus to many of those who came to see the Honeycreeper. A Black-throated Gray Warbler on September 30 and October 1 was very welcome.

The other less-usual species are recorded in the narrative section below. Among the more expected species, the number of Green Herons and Night-Herons seems to have been low. Sightings of Merlins are increasing although it is possible that represents one or more birds spending the fall in the vicinity Sabine Woods. An increase in Eastern Phoebes may be a welcome sign that the species did not suffer as badly as feared in the 2021 freeze event. Both kinglet species were well represented. Thrushes passing through during fall migration have always been few and far between and 2022 was no different. Some of the warblers that are very scarce in fall migration were apparently not reported in 2021. These include Golden-winged Warbler, Swainson's Warbler and Cerulean Warbler. The Cape May Warblers which had been regulars in mid-October in the "Tennessee Tree" for several years did not appear this year. Given the amount of attention given to the Red-legged Honeycreepers in that tree in that time frame, it is unlikely that there were there but not detected! One species that showed an increase was Palm Warbler. Prairie Warblers, passing through in September, also increased

In the space available, it is not possible to present an analysis of every or even most species. The overall analyses for previous fall migrations were all published and remain available on our web site to enable your own research.

Fall 2014 in Dec 14 issue	Fall 2018 in Dec 18 issue
Fall 2015 in Dec 15 issue	Fall 2019 in Dec 19 issue
Fall 2016 in Jan 17 issue	Fall 2020 in Dec 20 issue
Fall 2017 in Jan 18 issue	Fall 2021 in Mar 22 issue

John A. Whittle

Sabine Woods Fall Migration 2022 Number of Days Species Reported

MONTH	Aug	Sep	Oct	Oct	TOTAL	MONTH	Aug	Sep	Oct	Oct	TOTAL
			1-15	16-31					1-15	16-31	
Nbr of days with Reports	12	16	12	16		Nbr of days with Reports	12	16	12	16	
Yellow-billed Cuckoo	8	9	3	5	25	Blue-gray Gnatcatcher	12	18		14	44
Black-billed Cuckoo			1		1	Golden-crowned Kinglet				14	14
Common Nighthawk	2		2	3	7	Ruby-crowned Kinglet		5	12	16	33
Chuck-will's-widow	4	9	5	2	20	Eastern Bluebird					0
Eastern Whip-poor-will			1	2	3	Veery				1*	1*
Chimney Swift		3		1	4	Gray-cheeked Thrush		1			1
Ruby-throated Hummingbird	5	14	12	15	46	Swainson's Thrush		3	1	4	8
Rufous Hummingbird				9*	9*	Hermit Thrush			1	11	12
Wilson's Snipe				5	5	Wood Thrush		2	4	10	16
Magnificent Frigatebird		1			1	American Robin				3	3
Green Heron	3	2	2	1	8	Gray Catbird	2	2	8	12	24
Black-crown Night-Heron		1		3	4	Brown Thrasher	4	10	11	16	41
Yellow-crowned Night-Heron	1	1		1	3	Lark Sparrow				1	1
Black Vulture	2	10	4	14	30	Chipping Sparrow				3	3
White-tailed Kite				2	2	Clay-colored Sparrow				1	1
Northern Harrier		3	3	16	22	Field Sparrow				3	3
Sharp-shinned Hawk		1	3	7	11	Dark-eyed Junco				2	2
Cooper's Hawk	1		2	13	16	White-throated Sparrow			1	2	3
Bald Eagle		1			1	Song Sparrow				3	3
White-tailed Hawk				2	2	Lincoln's Sparrow			1	11	12
Red-shouldered Hawk	2	4	2	15	23	Swamp Sparrow				13	13
Broad-winged Hawk	3	3	1	7	14	Eastern Towhee				1*	1*
Swainson's Hawk		-		1*	1*	Yellow-breasted Chat	3	10		1	14
Barn Owl			1	10	11	Orchard Oriole	5	1			6
Great Horned Owl	2	1	1	6	10	Baltimore Oriole		8		5	13
Belted Kingfisher		5	3	9	17	Ovenbird	1	4	3	7	15
Yellow-bell.Sapsucker		1	2	11	14	Worm-eating Warbler	2	4		. 1	7
Red-headed Woodpecker			1*	1*	2*	Louisiana Waterthrush	6	1		-	7
Downy Woodpecker	10	19	10	16	55	Northern Waterthrush	4	13	4	5	26
Northern Flicker	10	10	1	13	14	Tennessee Warbler	1	2	6	15	24
Crested Caracara	1	2	3	9	15	Orange-crowned Warbler	- '	2	5	16	24
American Kestrel	-	2	2	10	12	Nashville Warbler		4	7	14	25
Merlin		5	5	13	23	Mourning Warbler		8	1	14	9
Peregrine Falcon		5	5	7	7	Kentucky Warbler	5	2	1		- 3 - 7
Olive-sided Flycatcher	3	7	2	2	14	Common Yellowthroat	1	4	8	16	29
Eastern Wood-Pewee	8	18	9	12	47	Hooded Warbler	9	9	8	3	29
Yellow-bellied Flycatcher	4	10	5	12	20	American Redstart	5	9 15	0 11	3 14	29 45
	4	2	3	2	20 11	Northern Parula	5	8	11	14	45 34
Acadian Flycatcher	4	2	3	2	3			8	1	15	34 16
Alder Flycatcher			4			Tropical Parula	1	~	I	15	7
Willow Flycatcher	-	6	1		7	Blue-winged Warbler		6		4.4	
Alder/Willow (Traill's) Flycatcher	5	10	2	5	17	Black-and-white Warbler	6	17	11	14	48
Least Flycatcher	5	12	3	5	25	Prothonotary Warbler	6	9	40	40	15
Empidonax sp	4	14	5	4	27	Magnolia Warbler		9	10	10	29
Eastern Phoebe	10	47	6	15	21	Chestnut-sided Warbler			5	3	8
Great Crested Flycatcher	12	17	4	1	34	Bay-breasted Warbler			2	5	7
Couch's Kingbird		_	6**	2**	8**	Blackburnian Warbler		7		3	10
Eastern Kingbird	3	5			8	Yellow Warbler	9	8	1	4	22
Scissor-tailed Flycatcher	-	1	2	12	15	Bay-breasted/Blackpoll Warbler				1	1
Loggerhead Shrike	5	6	5	14	30	Black-throated Blue Warbler				5	5
White-eyed Vireo	1	11	11	9	32	Palm Warbler			1	13	14
Yellow-throated Vireo	1	4	1	3	9	Pine Warbler				9	9
Blue-headed Vireo			3	13	16	Yellow-rumped Warbler			1	12	13
Philadelphia Vireo	1*		2	5	8*	Yellow-throated Warbler		3	1	3	7
Warbling Vireo	2	9		1	12	Prairie Warbler		5			5
Red-eyed Vireo	8	9	6	5	28	Black-throated Gray Warbler		1	1		2
Bank Swallow	1			1	2	Black-throated Green Warbler	1	4	5	13	23
Tree Swallow		3	2	15	20	Canada Warbler	8	13		2	23
N. Rough-wing. Swallow		1		11	12	Wilson's Warbler	2	10	10	16	38
Barn Swallow	9	3	2	9	23	Summer Tanager		3	2	6	11
Cave Swallow				3	3	Scarlet Tanager		1		4	5
Carolina Chickadee	6**	13**	8**	15**	42**	Rose-breasted Grosbeak			3	6	9
Red-breasted Nuthatch			1	11**	12**	Blue Grosbeak		3	8	11	22
Brown Creeper				12	12	Indigo Bunting	1	4	7	15	27
House Wren		2	10	16	28	Painted Bunting	5	11	1	-	17
Winter Wren		-	2	3	5	Dickcissel	Ť		1	7	8
Carolina Wren	-		1**	11**	12**	Red-legged Honeycreeper				12**	12**
			•				_			• ~	l

Field trip to Bolivar Flats – 18 March 2023

Birding is a wonderful hobby that allows one to enjoy the outdoors while challenging the individual's ability to identify different species by sometimes very subtle clues. But sometimes it is the outdoors themselves that are challenging the birder! Such was the case for the Golden Triangle Audubon's March field trip to Bolivar Flats. Unseasonably cold weather combined with a strong north wind made for challenging conditions at this well-known bird hotspot. It was a bit surprising that more than a dozen birders showed up to give the trip a go anyway but would it pay off?

The Bolivar Flats Shorebird Sanctuary is much beloved by birders because it always has large numbers of birds! Viewing of many different shorebird species can be easily seen in a relatively small easy to access area. When the tide is in anyway. When a strong north wind comes along, it can blow the water out quite a distance creating a very large mudflat and the birds can spread out over a much larger area. This makes the birding much more difficult. This was the state of the flats on the field trip date and the birds were very spread out and harder than usual to locate. Still, good finds were had!

The birding started with Horned Lark near the parking area. This is a generally scarce species on the upper Texas coast and Bolivar Flats is probably the easiest place to find it. Some of the usual easy species were also quickly located. Willet was found nearby and Sanderlings were along the waterline. Laughing Gulls and Ring-billed Gull were found with little problem. Moving further down the flats, a Piping Plover was spotted. More individuals of this endangered species would be located later as this area is a prime wintering ground for the species. A Wilson's Plover was also seen. Larger than the Piping Plover, this is a breeding species on the upper Texas Coast but unfortunately is no more numerous than their smaller cousins. A large, plump Black-bellied Plover was seen in winter plumage, giving no hint of the black belly for which, it was named. Dunlin worked the puddles alongside smaller Western Sandpipers. Semipalmated Plover was eventually found while American Avocets were fairly easy to see. Still, Avocets were not seen in the numbers usually encountered at the flats as they were likely spread out and feeding closer to the jetty. A few swallows zipped by the birders with most being Tree Swallows but with at least one newly arrived Barn Swallow among them.

Moving further out, more gulls were encountered including large Herring Gulls and dainty Bonaparte's Gulls. Terns were also found. Royal and Forster's Terns were the most numerous on the flats but Caspian Terns were also located and at least one Common Tern was hiding among the Forster's. A distant American Oystercatcher was scoped out while a young Reddish Egret allowed close approach. A flock of ducks just offshore consisted mainly of Green-winged Teal and Northern Shoveler but Lesser Scaup were also well represented and a few Gadwall were seen. Best of all a single Surf Scoter was among the ducks though it was not easy to see. Huge American White Pelicans and Brown Pelicans were easy to spot though few were close.

Perhaps the best sighting on the flats was a Peregrine Falcon. The fastest flying bird in the world, this species often hints Bolivar Flats in winter. Initially spotted as it flew overhead, the bird was eventually seen again sitting on the flats. The falcon had made a kill and was dining on it as the group watched. The falcon was too distant to determine exactly what it had caught but it was likely a shorebird of some kind. The group enjoyed scope views of this raptor before turning for a very cold walk back to the vehicles.

Leaving the flats, the group made some brief stops at other Bolivar area hotspots. Osprey and Common Gallinule were among the species spotted. A stop for lunch was then in order before the group travelled on to High Island. The rookery at Smith Oaks is always a hit for any field trip as it provides close looks at nesting wading birds. Great Egrets were numerous as were bright pink Roseate Spoonbills. Plenty of Neotropic Cormorants were seen along with fewer Anhingas. Tricolored and Snowy Egrets were spotted as were Great Blue and Little Blue Herons. Yellow-crowned Night-Herons and White Ibis. Another Peregrine Falcon perched nearby while a Crested Caracara was spotted flying over. Tree, Barn, Northern Roughwinged and Cliff Swallows all darted after insects over the pond. A singing Carolina Wren was heard nearby while a first of spring Chimney Swift flew over the woods. And just to give a hint of spring migration, a Wilson's Warbler and a Prothonatary Warbler were spotted in the thicker vegetation near the water.

A cold and unpleasant start resulted in fewer than usual numbers at Bolivar Flats but still plenty of nice finds. As the day wound on and the birders moved a little inland, the weather improved and good times were had at the Smith Oaks rookery. It just goes to show that even a day that starts out tough can end up pretty good – as long as you are out birding!

The following species were recorded by the field trip leader: Gadwall (2); Northern Shoveler (30); Green-winged Teal (40); Lesser Scaup (25); Surf Scoter (1); American White Pelican (15); Brown Pelican (26); Neotropic Cormorant (74); Anhinga (8); Great Blue Heron (7); Great Egret (203); Snowy Egret (1); Little Blue Heron (7); Tricolored Heron (5); Reddish Egret (1); Cattle Egret (1); Yellow-crowned Night-Heron (6); White Ibis (1); Roseate Spoonbill (50); Black Vulture (4); Turkey Vulture (10); Osprey (3); Northern Harrier (1); Cooper's Hawk (1); Crested Caracara (1); Peregrine Falcon (2); Clapper Rail (1); Common Gallinule (4); Black-bellied Plover (10); Wilson's Plover (1); Semipalmated Plover (1); Piping Plover (6); Killdeer (6); American Oystercatcher (1); American Avocet (30); Greater Yellowlegs (2); Willet (9); Long-billed Curlew (2); Long-billed/Short-billed Dowitcher (1); Sanderling (15); Western Sandpiper (15); Least Sandpiper (1); Dunlin (25); Laughing Gull (95); Bonaparte's Gull (13); Ring-billed Gull (2); Herring Gull (5); Caspian Tern (2); Common Tern (1); Forster's Tern (35); Royal Tern (50); Chimney Swift (1); Belted Kingfisher (2); Red-bellied Woodpecker (1); White-eyed Vireo (1); Blue Jay (1); Horned Lark (2); Tree Swallow (35); Northern Rough-winged Swallow (5); Cliff Swallow (2); Barn Swallow (5); Carolina Wren (1); Ruby-crowned Kinglet (2); Blue-gray Gnatcatcher (2); European Starling (10); Cedar Waxwing (10); Orange-crowned Warbler (1); Yellow-rumped Warbler (45); Prothonotary Warbler (1); Wilson's Warbler (1); Red-winged Blackbird (25); Eastern Meadowlark (1); Boattailed Grackle (10); Boat-tailed/Great-tailed Grackle (5); Steve Mayes Northern Cardinal (5)

Bird Sightings – March 2023

For this column, we review, looking for rare and very rare species, all credible eBird and other records reported to us from nearby Texas counties – Angelina, Hardin, Jasper, Jefferson, Newton, Orange, Sabine, San Augustine and Tyler. We also review records for Chambers, Galveston, Harris and Liberty Counties in Texas, and Calcasieu and Cameron Parishes in Louisiana. In most cases, we do not include birds that are "heard only" or probably hybrids.

Local Counties (listed above)

Buff-bellied Hummingbird Mar 1-24 JEF-Nederland (1) JJW, mult obs Purple Gallinule JEF-TP (1) Paola and Michael Smith Mar 18 Wood Stork Mar 20 SAB-Toledo Bend- Carriece Creek (5) Emma Walker, Antonio Jara. Suzanne Walker JEF-SW (1) Johnny Johnson Swainson's Hawk Mar 13 Great Crested Flycatcher Mar 2 HAI-Big Thicket NP-Lance Rosier Unit (1) David Doyle **Tropical Kingbird** Mar 28,31 JEF-Hwy 87 (1) Mike Austin, JAW Yellow-throated Vireo Mar 13 JEF-SW (1) Johnny Johnson **Cliff Swallow** Mar 3 ANG-Lufkin Ellen Trout Park (12) Garv Hunter Wood Thrush JEF-SW (1) SM, Johnny Johnson Mar 12-13 Mar 23 HAI-Kountze (1) Kelly Walker Mar 6-15 HAI-Silsbee (3) Sherry Gibson **Purple Finch** Mar 15 HAI-Silsbee (1) E Harrison SAB-Hemphill (1) David Bell Mar 12 JEF-SW SM, MC, Johnny Johnson Worm-eating Warbler Mar 25 JEF-SW Bonnie Roemer Prothonotary Warbler Mar 14 Mar 17 JEF-SW (1) J Berner, Greg Cook Hooded Warbler JEF-SW (1) Johnny Johnson Mar 13 Black-headed Grosbeak SAB-Hemphill (1) David Bell Mar 27 Painted Bunting Mar 1-31 JEF-Nederland (3 m, 1 f) HS, mult obs Nearby Counties Chuck-will's-Widow Mar 14 GAL-HI Boy Scout Wds (1) WE Eastern Whip-poor-will Mar 7 CAL-Moss Bluff (1) Lauren Lyons Mar 11 HAS-Edith L Moore (1) Stephen Faliick Broad-tailed Hummingbird Mar 4-25 GAL-Dickinson (1) Jane Murtishaw, Purple Gallinule CAM-Cameron Prairie NWR Pintail Mar 23 Loop (1) Ruth Cronan Baird's Sandpiper Mar 14 HAS-El Jardin Park (1) Michael Allen American Woodcock Mar 4 HAS-EI GAL-Virginia Pt (1) Greg Whittaker Mar 27 Pomarine Jaeger Mar 13 CHA-HI Beach (1) WE GAL-GI SP (1) Martin Liebermann Mar 27 Parasitic Jaeger GAL-HI Beach (1) WE Mar 2 CHA-ANWR (1) Mike Austin Franklin's Gull: Mar 7 GAL-Moody Gardens (1) Greg Mar 8 Whittaker CAM-Peveto Beach (1) Charlotte Iceland (Thayer's) Gull Mar 29 Chehotsky Lease Tern Mar 12 CAM-Hackberry (2) Jean Trahan Mar 13 CA-Cameron Ferry (6) Jean Trahan Black Tern Mar 10 CAM-Holly Beach (1) Jack Rogers. Nick Ramsey Wood Stork Mar 4 CAL-Sulphur (1) Paul Zimmermann, David Booth, Beth Kramer HAS-Bellavista (4) Marie Asscherick Mar 21 GAL-League City (1) Mattie Elsik Mar 27 HAS-Clay Rd nr Blalock (2) Hannah Mar 30 and Jo Willars GAL-BF (1) Jon Piasecki, WE Magnificent Frigatebird Mar 2 Mar 8 GAL-Galveston Is SP (1) Kristen Vale Mar 13 GAL-HI Beach (1) WE Least Bittern CAM-Cameron Prairie NWR Pintail Mar 13 (1) Jean Trahan Snail Kite Mar 30 HAS-Bellavista area (1) Mike Austin Broad-winged Hawk Mar 10-18 CAM-Trosclair Road (1) Nick Ramsev GAL-57-acre Park (1) Brian Berry, Mar 11 Burrowing Owl Mar 1-25-CHA-ANWR Frozen Pt (1) mult obs Mar 12-26 CAL-Corbina Rd (1) Esme Rosen, L Leblanc (contuing). Ladder-backed Woodpecker Mar 5 GAL-SE of Hitchcock (2) Richard Liebler, Kyle O'Haver, Robert Becker, Clayton Leopold Great Crested Flycatcher Mar 9 HAS-J P Landing Park(1) Margaret

Farese

The format of the listing is Species – Date – County-and brief location information if available – (number) – Observer(s). If more precise location information is needed, it can often be obtained by using the bird species map feature to find the sighting in eBird, opening the checklist, and using the map function to display the location as precisely as the observer provided. **Commentary:** Lots of early migrants, and a Snail Kite!

	Mar 11	HAS-Armand Bayou NC (1) Laura Bradley
	Mar 13	GAL-HI Gast Red Bay (1) WE
	Mar 13	HAS-La Porte (1) Chuck Davis
Eastern Wood-Pewee	Mar 27	GAL-HI Eubanks Woods (1) WE
	Mar 15	
Acadian Flycatcher	Mar 15	GAL-HI Smith Oaks (2) Jon Piasecki,
Leget Elvesteher	Mar 30	Carrie Chapin
Least Flycatcher	Mar 30	CAM-Peveto Woods (1)
		IngridTonneman
Say's Phoebe	Mar 6-22	GAL-Moody Gardens (1) Clayton
		Leopold, Greg Whittaker. Mult obs
Vermilion Flycatcher	Mar 19-28	CHA-ANWR Visitor IS (1) Normal
		Welch, mult obs
Eastern Kingbird	Mar 18	CAM-Johnson Bayou (1) Nick
		Ramsey, Jas Smithers, Jack Rogers
	Mar 19	CAM-Peveto Woods (1) Jesse Ray
Scissor-tailed Flycatcher	Mar 18,20	
		(1) Jesse Ray
Fork-tailed Flycatcher	Mar 12	CHA-FM1985 (1) L Leblanc
Red-eyed Vireo	Mar 4	HAS-Jesse Jones Park (1) Alicia
		Mein-Johnson
Swainson's Thrush	Mar 22	GAL-HI Smith Oaks (1) WE
Wood Thrush	Mar 18	CAM-Peveto Woods (1) James
		Smithers, Jack Rogers
Western Meadowlark	Mar 19-20	HAS-J P Landing Park Jas. Rieman,
		Susan Kennedy, Wendy Wright
Orchard Oriole	Mar 7	CAM-Lacassine HQ (1) Ami Horowitz
Worm-Eating Warbler	Mar 14	GAL-HI Boy Scout Woods (1) WE
	Mar 18	CAM-Peveto Woods (1) Nick
		Ramsey, Jas. Smithers, Jack Rogers
Northern Waterthrush	Mar 30	HASBellavista area (1) Mike Austin,
		Judy Behrens
Prothonotary Warbler	Mar 14	CAM-Peveto Woods (1) Jean Trahan
MacGillivray's Warbler	Mar 18	CAM-Peveto Woods (1) Nick
		Ramsey, Jas. Smithers, Jack Rogers
Tennessee Warbler	Mar 13	GAL-Lafitte's Cove (1) Richard
		Liebler
	Mar 27	HAS-Friendswood (1) Chris Bick-
	Mar 29	HAS-Rice Univ (1) Cin-Ty Lee
Nashville Warbler	Mar 12	GAL-Lafitte's Cove (1) Paul Sivon
Kentucky Warbler	Mar 19	GAL-Corps Woods (1) Robert
		Kirchner
Hooded Warbler	Mar 11	HAS-Armand Bayou NC (1) Andrew
		Hamlett, Richard Rulander
	Mar 13-14	CAM-Peveto Woods (1) Chuck Davis,
		Jean Trahan
Blackburnian Warbler	Mar 19	GAL-HI Smith Oaks (1) Linda AR
Yellow-throated Warbler	Mar 3	CAL-Lake Charles (1) David Booth
Black-throated Blue Warbler	Mar 25	CHA-ANWR Skillern (1)Tim Arthur,
		Jeremy Bensette
Black-thr. Green Warbler	Mar 13-14	HAS-Briar Forest (1) Kristie Tobin
Western Tanager	Mar 28	GAL-HI Smith Oaks (1) Carrie
		Chapin
Rose-breasted Grosbeak	Mar 16-26	CAM-Peveto Woods (1) Jesse Ray,
		Esme Rosen, mult obs
	Mar 26	HAS-S of Addicks Res (1) Lucy Vick
	Mar 28-30	CAL-Moss Bluff (1) Lauren Lyons,
		mult obs
Black-headed Grosbeak	Mar 18-26	CHA-Baytown (1) David Hanson
Indigo Bunting	Mar 18	CAM-Peveto Woods (1) Jesse Ray
Painted Bunting	Mar 3-5	CAL-N of Sulphur (1) Claire Sylvest
C C	Mar 25	CAM-Peveto Woods (1) Duane Huval

Golden Triangle Audubon Society P. O. Box 1292 Nederland, Texas 77627-1292

FIRST CLASS MAIL

NATIONAL AUDUBON MEMBERSHIP FORM

Membership Form

To join the National Audubon Society, please complete this form and return with Introductory Membership fee of \$20 (payable to the National Audubon Society, or indicate you wish to be billed) to National Audubon Society, Memberships, PO Box 97194, Washington, DC 20090-7194. To use this form to give a membership as a gift, please complete the form and indicate your name in the appropriate space. Payment should accompany gift memberships.

Name:

Address:

Gift from:

Check enclosed	Please bill me
Golden Triangle Aud	lubon C3ZW250Z

Brown Pelican

SUBSCRIPTION/ MEMBERSHIP FORM

_____ Mail to Golden Triangle Audubon Society (GTAS), P. O. Box 1292, Nederland, Texas 77627-1292 or bring to any Membership Meeting. National Audubon Society (NAS) members with addresses within our official territory are automatically GTAS members without further payment, but are asked to contribute \$20 if they are able since we only receive a very small amount from NAS after the first year. Subscriptions from NAS Members with mailing addresses outside our official territory, and others wishing to subscribe are \$20 per year (Jan-Dec). Name:

Address:

eMail or Tel No:

RARE BIRD ALERTS

Unfortunately, almost all the local and regional telephone Rare Bird Alerts have been discontinued in favor of various forms of Internet distribution.

The Texas-wide Rare Bird Alert, maintained by Houston Audubon Society, is available on their web-site at http://www.houstonaudubon.org/ Email alerts are also available for a fee.

Many rare bird sightings in Texas are posted on Facebook Texbirds or on the TEXBIRDS listserv. Archives of the listserv are at **www.freelists.org/ archive/texbirds.** It is not necessary to subscribe to view the archives, which include all recent postings.

Detailed information/maps on birding sites in Texas is available on the Web at http://www.texasbirds.org/birdingLo cations.php. This leads you to the maps of the various eBird hotspots. You can also subscribe (free) on eBird for email alerts for all rare birds reported in a specific county.

Ner Unique Checklistes 1 3 1 1 1 2 1 2 1							Au	gus	st														Sep	tem	ber	-									то
Velow-billed Cuckoon 1 1 2 2 2 2 2 2 2 1	Date	8	13	14	15	18	19	21	22	25	26	27	30	1	3	5	6	7	8	9	10	11	12	13	14	15	17	18	21	26	27	28	29	30	
Common Mighthaw 1 1 2 1 <th1< th=""> 1 1</th1<>	Nbr Unique Checklists	1	3	1	1	1	1	2	1	1	2	2	1	1	2	1	2	1	2	1	2	6	1	3	1	1	2	2	1	1	1	1	1	3	53
Common Mighthaw 1 1 2 1 <th1< th=""> 1 1</th1<>																																			
Chack-wale P I <thi< td=""><td>Yellow-billed Cuckoo</td><td>1</td><td>1</td><td></td><td>2</td><td></td><td>2</td><td>2</td><td></td><td>2</td><td>3</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td></td><td>2</td><td></td><td></td><td>2</td><td></td><td></td><td>1</td><td></td><td></td><td>1</td><td>3</td><td>27</td></thi<>	Yellow-billed Cuckoo	1	1		2		2	2		2	3	1							1	1	1	1		2			2			1			1	3	27
Chack-wale P I <thi< td=""><td>Common Nighthawk</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td></thi<>	Common Nighthawk		1									2																							3
Chamop Swith Chamop Swith Chamop Swith C <thc< th=""> C <thc< th=""> <</thc<></thc<>	0				1						1				1		1	2	2	1	9	5	1											1	28
Ruly-threaded Hummippite I </td <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>_</td> <td>_</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td>-</td>	-		-		-						-				-			_	_	-	-		-									1		1	-
Wilson's Shipe Vilson's Shipe Vilson'		4		2				3			2	2	1		2		2		Λ	5	5			Λ			7		2	6	1		ર		-
Green Horon 1 <th1< th=""> 1 <th1< td=""><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td>5</td><td></td><td></td><td>2</td><td>2</td><td>1</td><td><u> </u></td><td>2</td><td></td><td>2</td><td></td><td>4</td><td>5</td><td>5</td><td>10</td><td></td><td>4</td><td></td><td></td><td>'</td><td></td><td>2</td><td>0</td><td>1</td><td>2</td><td>5</td><td>4</td><td></td></th1<></th1<>				2				5			2	2	1	<u> </u>	2		2		4	5	5	10		4			'		2	0	1	2	5	4	
Biake Around Night-Heron Night-Heron Might-Heron Might			4	4																				4											-
Yellow-converd Nght- Hearon I<			1	1	1																			1						1					-
Heron I <td>•</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td>	•																										1								1
Biock Vulture Biock Vulture Biock Vulture Field Viet Viet Viet Viet Viet Viet Viet Viet																																			
Northem Harrier Northem Ha																																			2
Sharp-Shimed Hawk I	Black Vulture		3		1										1		2		2					8	4					2	2	2		2	41
Cooper Hawk I <thi< th=""> I <thi< td=""><td>Northern Harrier</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>3</td></thi<></thi<>	Northern Harrier																					2											1		3
Red-shouldened Hawk I	Sharp-shinned Hawk																																	1	1
Red-shundered Hawk I	Cooper's Hawk				1																														1
Broad-Mark Broad-M	Red-shouldered Hawk						1					1															1	1					1	1	6
Barn Out I<		-	-	-	-	-		1	-			L.	1	1					1		-		-	-			-	† i	-	2	-	-	-		-
Great Homed Owl I	•						· ·												•											-				· ·	
Belted Kinglisher I				-	1			-			1																					-		1	-
Yellow-belled Spanucker 2 4 1 4 6 5 1 2 3 1 2 2 5 1 6 5 1 2 5 1 6 5 1 2 5 1 6 5 1 2 5 1 6 5 1 2 5 6 6 5 1 2 5 6 6 5 1 2 5 6 6 5 1 2 5 6 6 5 1 2 5 6 6 7 1 <th1< th=""> 1 1 <th1< th=""></th1<></th1<>					1						1			<u> </u>										4			4			4					-
Downy Woodpecker 2 4 1 4 6 5 1 2 3 1 2 3 1 2 2 5 1 6 5 1 2 5 1 6 5 1 2 5 4 5 1 6 1 2 4 5 2 5 4 6 5 1 2 5 4 5 1 2 5 4 5 1 2 5 4 5 1 2 1 2 1 2 1 2 1 1 1 2 1 <th1< th=""> 1 1</th1<>		 			-	-	-	-	-					I				1						1			1			1					-
Norther Flicker I <thi< th=""> I I</thi<>																																			
Crested Caracara I		2	4	1	4		6	5	1	2	3	3	1	2	3	1	2	2	5	1	6	5		4		1	6	1	2	4	5	2	5	4	93
American Kestel I	Northern Flicker																																		0
Merinin I </td <td>Crested Caracara</td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>3</td>	Crested Caracara			1																							1			1					3
Peregrine Falcon I	American Kestrel																																		0
Olive-sided Flycatcher I <td>Merlin</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>5</td>	Merlin																							1							1	1	1	1	5
Olive-sided Flycatcher I <td>Peregrine Falcon</td> <td></td> <td>0</td>	Peregrine Falcon																																		0
Eastern Wood-Pewee N S 1 2 1 3 1 2 1 3 1 2 5 1					1							1	2		1		1				1	1		2	2									1	13
Yellow-bellied Flycatcher 2 1 2 1<	•		5	1		1	2			10	7			2		1		2	10	2					~	2	7	1	1	2	1		2		-
Acadian Flycatcher 1 1 2 1				1		1	3			10		2	1	3	0			3		2			1		1	2			-	3	1		2		
Alder Flycatcher I		_					_				1					3	2				1	1	I	1			2							1	
Willow Flycatcher I <thi< th=""> I <thi< th=""></thi<></thi<>			1				2	1											1						1										
Alder/Wilow (Traill's) 1 1 1 1 1 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 2 2 2 1 1 1 2 2 2 1 1 1 1 2 2 3 1 1 2 2 1 1 1 1 1 2 2 3 1 1 1 1 1 1 2 2 3 1 1 1 1 1 2 2 3 1 1 1 1 1 1 2 2 3 1 1 1 1 1 1 2 2 3 1 <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>												1															1								-
Flycatcher I <thi< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>1</td><td></td><td>1</td><td></td><td>1</td><td>2</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td></thi<>															1		1		1		1	2		1											7
Least Flycatcher 3 1 1 1 1 1 1 1 2 2 2 1 1 1 1 2 2 1	Alder/Willow (Traill's)																																		
Empidonax sp 4 4 5 2 2 2 3 2 2 3 1 2 5 3 2 6 2 2 1 <t< td=""><td>Flycatcher</td><td></td><td>1</td><td></td><td>1</td><td></td><td>1</td><td></td><td></td><td></td><td>1</td><td></td><td>2</td><td></td><td>2</td><td>2</td><td>1</td><td>1</td><td>4</td><td>1</td><td>2</td><td></td><td></td><td>4</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td>25</td></t<>	Flycatcher		1		1		1				1		2		2	2	1	1	4	1	2			4	1							1			25
Empidonax sp 4 4 5 2 2 2 3 2 2 3 1 2 5 3 2 6 2 2 1 <t< td=""><td>Least Flycatcher</td><td></td><td>3</td><td></td><td>1</td><td></td><td></td><td>1</td><td></td><td></td><td>1</td><td>1</td><td></td><td></td><td>1</td><td></td><td>2</td><td></td><td>3</td><td>1</td><td>1</td><td>2</td><td>2</td><td>2</td><td>1</td><td></td><td>1</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>1</td><td>25</td></t<>	Least Flycatcher		3		1			1			1	1			1		2		3	1	1	2	2	2	1		1			1				1	25
Eastern Phoebe I			4			2					2	3			2		2	3	13	2	5	3		6	2		2			1		1		1	56
Great Crested Flycatcher 1 5 2 5 1 7 2 1 1 4 3 3 2 4 3 2 6 8 4 7 2 1 5 3 1 1 2 1 </td <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td>_</td> <td>-</td> <td></td> <td>_</td> <td>-</td> <td>-</td> <td>_</td> <td>-</td> <td>_</td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			-			-					_	-			-		_	-		_	-	-	_	-	_		_								
Couch's Kingbird 1		1	5	2	5	1	7	2	1	1	Λ	3	3	2	Λ	3	2	6	8	1	7	2	1	5			ર	1	1	2			1	1	-
Eastern Kingbird 1		-	5	2	5	1	'	2	-	1	4	5	5	12	4	5	2	0	0	4	1	2	1	5			5	1	-	2			1	-	
Scissor-tailed Flycatcher I <thi< th=""> I <thi< th=""> I I <thi< td="" th<=""><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>45</td><td>4</td><td></td><td></td><td></td><td>40</td><td></td><td></td><td></td><td></td><td>4</td><td></td><td>4</td><td></td><td></td><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td></thi<></thi<></thi<>		4										45	4				40					4		4				4							-
Loggerhead Shrike 1 <th1< th=""> 1 <th1< th=""> <</th1<></th1<>		1										45	1	1			10					4		1				1							
White-eyed Vireo 4 4 6 4 6 6 6 6 1 1 2 3 2 5 1 3 4 1 5 33 Yellow-throated Vireo 1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u> </u></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td>1</td> <td></td>							<u> </u>	-	-			-		1																					
Yellow-throated Vireo I		1			1	-	-		-		1	2	1		1		1		1																12
Blue-headed Vireo I			4																			1	2	3	2		5	1		3	4		1	5	32
Philadelphia Vireo I	Yellow-throated Vireo											1							1	1	1									1					5
Warbling Vireo I	Blue-headed Vireo													1																					0
Warbling Vireo I	Philadelphia Vireo									(1)																									0
Red-eyed Vireo 6 3 1 2 15 8 2 1 1 6 4 2 2 1 1 55 Tree Swallow 1 2 1 2 1 1 6 4 2 1 1 6 4 2 1 1 1 55 Tree Swallow 1 2 1 2 1 2 1 2 1 2 1 4 4 1 6 4 1 6 4 2 1 1 16 3 1 2 1 3 3 1 2 1 1 1 6 4 4 2 1 1 16 3 1 4 <th< td=""><td>Warbling Vireo</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>. /</td><td></td><td>1</td><td></td><td></td><td></td><td>2</td><td>2</td><td></td><td>3</td><td>1</td><td>2</td><td>1</td><td>2</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>17</td></th<>	Warbling Vireo									. /		1				2	2		3	1	2	1	2	1									1		17
Tree Swallow I <thi< th=""> <thi< th=""> <thi< td=""><td></td><td>Ĩ</td><td>6</td><td></td><td>3</td><td>1</td><td></td><td>2</td><td></td><td>15</td><td></td><td></td><td>1</td><td>1</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>2</td><td></td><td></td><td></td><td>59</td></thi<></thi<></thi<>		Ĩ	6		3	1		2		15			1	1	2															2	2				59
N. Rough-wing. Swallow I <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td><u> </u></td> <td></td> <td></td>							-	-	-			-							5					-							-		<u> </u>		
Barn Swallow 5 1 2 12 3 8 2 60 1 2 4 4 99 Cave Swallow - - - - - - - - - - - 99 Cave Swallow - - - - - - - - - - - - 0<			-	-	-	-	-	-	-				-	1							5							-			-	-			
Cave Swallow I <t< td=""><td></td><td>5</td><td></td><td>_</td><td>-</td><td>40</td><td><u>^</u></td><td>0</td><td>-</td><td></td><td>~</td><td>60</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>~</td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td></td></t<>		5		_	-	40	<u>^</u>	0	-		~	60		1							~	4											-	-	
Carolina Chickadee 2 2 2 2 1 1 2 1 1 2 1		5	1	2		12	3	8			2	60	1								2	1								2					
Red-breasted Nuthatch I			-	-	-	-	-		-			-					-		-		-								-						-
Brown Creeper I <thi< th=""> <thi< th=""> <th< td=""><td></td><td></td><td>2</td><td></td><td>2</td><td></td><td>2</td><td>1</td><td></td><td></td><td>1</td><td>2</td><td></td><td></td><td>1</td><td></td><td>2</td><td></td><td>2</td><td>1</td><td>2</td><td></td><td></td><td>1</td><td>1</td><td></td><td>1</td><td></td><td>2</td><td>1</td><td></td><td>1</td><td>1</td><td>1</td><td>27</td></th<></thi<></thi<>			2		2		2	1			1	2			1		2		2	1	2			1	1		1		2	1		1	1	1	27
House Wren Image: Second s	Red-breasted Nuthatch																																		0
Winter Wren Image: Second	Brown Creeper													1																					0
Winter Wren Image: Second	House Wren																															1		1	2
Carolina Wren 2 3 11 8 2 6 5 3 2 11 12 10 3 8 1 6 5 11 8 10 9 9 11 1 15 7 8 6 7 12 22	Winter Wren																																		0
Blue-gray Gnatcatcher 2 13 11 8 2 6 5 3 2 11 12 10 3 8 1 6 5 11 8 1 2 0 1 1 12 10 9 10 9 9 11 1 1 15 7 8 6 7 12 22		-	-	-	-	-	-	-	-				-	1							-		-	-				-	-		-	-	-	-	Ō
		2	12	11	Q	2	6	5	2	r	11	12	10	2	Q	1	6	5	11	Q	10	۵		۵			11	1	15	7	Q	6	7	12	-
	Golden-crowned Kinglet	2	13	11	0	2	0	5	5	2	11	12	10	L,	U	1	0	J	11	υ	10	3		3			11	1	10	1	0	0	'	12	0

						Aug	gus	t													S	Sept	em	ber										то
Date	8	13	14	15				22	25	26	27	30	1	3	5	6	7	8	9	10	11	12	13	14	15	17	18	21	26	27	28	29	30	
Nbr Unique Checklists	1	3	1	1	1	1		1	1	2	2	1	1	2	1	2	1	2	1	2	6	1	3	1	1	2	2	1	1	1	1	1	3	53
Ruby-crowned Kinglet																													2	4	7	11	18	
Eastern Bluebird																																		0
Gray-cheeked Thrush																																1		1
Swainson's Thrush																		1					2									2		5
Hermit Thrush																																		0
Wood Thrush																		-													1		1	2
American Robin															-	_	-	-															-	0
Gray Catbird							1					1	1				_		_											1				4
Brown Thrasher						1		4			1	1	-			1	2	2					1					1	3	1	1	1	2	-∓ 19
						1		1			1	1				1	2	2					1					I	3	1	1	1	2	-
Chipping Sparrow	_																																	0
Clay-colored Sparrow																																		0
Field Sparrow																																		0
Dark-eyed Junco																																		0
White-throated Sparrow																																		0
Song Sparrow	_																																	0
Lincoln's Sparrow		-	-	-	-	-	-	-		-							-	-			-	-	-				-							0
Swamp Sparrow			-	-		-	-	-							-	_	-	-			-	-	+											0
Yellow-breasted Chat	1			1		1	1									_	-	8	1		1	2	7						1	1	1	1	1	27
	_									~					_	_	_	0	I				1						1	1	1	1	1	
Orchard Oriole	3			3		4	1			2			_					_				2												15
Baltimore Oriole			-	-		-		-					2						15	12	1		4							1		1		45
Ovenbird										1								1					2			2						1		7
Worm-eating Warbler				1						2							1	1	1	2														8
Louisiana Waterthrush		2	1			1			1	1	2			1																				9
Northern Waterthrush				1					1	2	2		2	2	3	4	3	3	1		1		1					1	2		2		1	32
Tennessee Warbler	-			· ·		1			•	-	-		-	-	•	•		•			•		•						-		-	1	1	3
Orange-crown. Warbler	_					· ·									_																	•		0
																							4	4								4		-
Nashville Warbler																							1	1					1			1		4
Mourning Warbler															1	1		4				1		5		1			2				1	16
Kentucky Warbler		3		2		1	1			1								1												1				10
Common Yellowthroat						1																2	2						2			2		9
Hooded Warbler		5	1	5		3	3	1	1	6	8		1	4		2		4			1			2		2		1					2	52
American Redstart		1	2		1					2	2			1		1			2	2	1	2	3			3	1	1	2	1	3	3	7	41
Northern Parula	_													2				1					1			1			2		1	1	2	11
Blue-winged Warbler											2			-			-	•	2	3		1	•	1		2			-	1	•	•	-	12
Black-and-white Warbler	_	7	5	5		11				3	3			7	1	4	2	8	2		4		13	3		14			4	6	1	2	5	123
											-				1		2						13						4	0	1	2	5	
Prothonotary Warbler	_	1	3	3		2				1	1			5		5		4	1		1	1		1		1							•	31
Magnolia Warbler																					1	1	1		1	1			3	1		1	6	16
Chestnut-sided Warbler																																		0
Bay-breasted Warbler																																		0
Blackburnian Warbler																1				1	1	3	4	1		2								13
Yellow Warbler	1	6	9	6		14	7	3		2	3	2	4	8		2		3			1			1				1	2					74
Black-throated Blue	1	-	-			-		-			-										-		-											1
Warbler																																		0
Palm Warbler			-	-		-									-	_																		0
	-															_			_															-
Pine Warbler	-	-		-	-	-	-	-																										0
Yellow-rumped Warbler																																		0
Yellow-throated Warbler																1		1															1	3
Prairie Warbler														1				1				1	1					1						5
Black-throated Green																																		
Warbler	1	1																	2	1		1											1	6
Canada Warbler	1	3	2	1		4	-	-	5	2	2	2		6	5	7	8	14	4		1		6	2		4							1	93
Wilson's Warbler		0	2	-	-	-	1	-	0	1	~	~		3	5	'	5	1-7	7		2		4	-		3		1	3		2	1	4	26
	1		-	-		-	1	-		1				$\left \right $				-+	_	-	۷	5				3		1			2	1		
Summer Tanager	-		-	-		-		-															1						1				1	3
Scarlet Tanager			-	-		-		-																									1	1
Rose-breast.Grosbeak																																		0
Blue Grosbeak																				1											1	2		4
Indigo Bunting							2							2									2						2				2	10
	1	1	1	3	-	1		1	1	1				2		1	3	3	1	2	3		4			3	-		1	1				31
Painted Bunting																																		

			_		_	_									ctol												_	_	TOTAL	TOTAL
Date	1	2	3	4	5	8	9								18								26		28	-		31		Season
Nbr Unique Checklists	3	2	1	1	1	3	2	4	3	1	2	5	22	32	26	29	18	20	51	26	16	12	21	16	12	25	15	3	372	425
Yellow-billed Cuckoo	1								1			1			1		1	1							1	1			8	35
Common Nighthawk						1						1	1	1	1														5	8
Chuck-will's-widow					2		1		1	1	1		1													2			9	37
Chimney Swift																											1		1	4
Ruby-throated Hummingbird	: 4	3	7	6	4	7	6	6	16	8	4	12	35	45	26	29	14	10	20	15	8	15	9	6	5	3	3		326	399
Wilson's Snipe														1			3		1	2						1			8	8
Green Heron							1		1																	1			3	8
Black-crown Night-Heron															1			1									1		3	4
Yellow-crowned Night-																														
Heron																											(1)		0	2
Black Vulture	1	3				6					1		2	3	4	2	2	4	5	5	3		3	3	5	5	1		58	99
Northern Harrier	1	-				-	2	1					3	3	4	2	5	5	3	4	2	2	1	1	2	3	1	2	47	50
Sharp-shinned Hawk		2					-		1	1			Ū	1	2	-	1	1	•		-	-		1	2	21	· ·	-	33	34
Cooper's Hawk		2					1					1		1	3	1	1	1	1	1		1		1	1	1	1	1	17	18
			1				1					_	1	-							1		1		2			-		-
Red-shouldered Hawk	4	-	1									1	1	1	1	1	2	2 3	1	2	1	2	1	1	2	1	1	-	22	28
Broad-winged Hawk	1	-	-		-		-						1	2	2	1		3	1					_		~	_	-	13	20
Barn Owl	1	-			-									-	1	~	1		1		1	1	1	2		2	3	1	15	15
Great Horned Owl			1											1		2	2			1		2		2				_	11	14
Belted Kingfisher					1	1			1					1		1	1		1	2		1		1		1		1	13	18
Yellow-bell.Sapsucker							1	1							2	2	2	3	4	1			3	2	1	2	2		26	27
Downy Woodpecker	6	2		2	3	4	6	2	5		2	4	3	7	4	6	5	2	4	2	2	3	5	4	3	2	5	2	95	188
Northern Flicker												1	1	1	1	1	1	1	1	1		1	2	2	1	1			16	16
Crested Caracara	1				1		1							1		1			1	1	2		1	1		1	1		13	16
American Kestrel	2					1								1	2	1		1	2	1	1	2				1	1		16	16
Merlin	1	1		1			1					1	1	1	1	2	1		1	1		1	2	1	1	1	1		20	25
Peregrine Falcon	-	-		-										1	1	_	-		1			1	_		1	1	1		7	7
Olive-sided Flycatcher	1					1								1								•		1			· ·		4	17
Eastern Wood-Pewee	1	1			2	1	4	2	3		2	5	6	4	3	2	5	1	2	5	1	2	1				1		54	196
Yellow-bellied Flycatcher	1	-	1	1	2	-	4	2	3		2	5	0	4	1	2	5	1	2	5	-	2	1				1		6	27
,	-		1	1			1	4				4	4	4															-	
Acadian Flycatcher								1			1	1	1	1															5	12
Alder Flycatcher															ļ!														0	3
Willow Flycatcher						1																							1	8
Alder/Willow (Traill's)																														
Flycatcher						1	1																						2	27
Least Flycatcher						1			1		1			1			1		1	1							1		8	33
Empidonax sp	3				1	2	2		2				1	1						1	1								14	70
Eastern Phoebe		1				1	4		1		3	1		2	10	4	4	2	4	3	1	1	3	3	2	3	2	3	58	58
Great Crested Flycatcher				1		1	2					1				1													6	94
Couch's Kingbird			2	1	1		1			1	1							1		1									9	9
Eastern Kingbird																													0	64
Scissor-tailed Flycatcher		1							3				20	5	2	2		8	1	2			7	1	3	2	30		87	88
Loggerhead Shrike	1		-	1	1		1		1				1	1	1	1	2	1	2	1	1		1	1	2	2	1	-	23	35
White-eyed Vireo	7	3		2	3	3	10	4	8	2	3	13		6	4	4	2	1	2	1	· ·			-	-	1	+ ·	-	86	118
Yellow-throated Vireo	-	0	-	~		0	10	4	0	~	0	10	'	5	4	4	-		1	-						-	-	-	4	9
Blue-headed Vireo		-	-	1		-	1	-				1			3	1	2	1	1	1		1	4	11	1	2	2	2	35	35
		-		1	-	-	1		1	-		1		-	3		2	1				1	4	11	1	2	2	2	35	35
Philadelphia Vireo		-	-		-		-		1			I				1		I	1	1								-	-	
Warbling Vireo		-	-	-		-								<u> </u>	<u> </u>	1												-	1	18
Red-eyed Vireo				3	1		_	1	1		1	1	1		1		1			1						1	-		13	72
Tree Swallow							5					30			30			16		5	2	5	8	10	2	10	2		231	278
N. Rough-wing. Swallow													1	15		20	10	15	7	7			38	9	2				129	133
Barn Swallow						4						2	7	12			5	31	7		2	2		1	2				75	174
Cave Swallow																		1				1	4						6	6
Carolina Chickadee	1		2	1	1	1		1	1			1	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2		33	60
Red-breasted Nuthatch			1			1			1				2		1	1	2		1		1	2	3	1		1	1		17	17
Brown Creeper		-			-										1	1	2	1	1	1	1		1	1	1	2	1		14	14
House Wren	3	1	-	1	1	3	4	1	13	-	3	7	4	3			24		6	5	2	3	4	4	5	6	6	4	141	143
Winter Wren	Ĕ	Ľ	-	- ·	<u> </u>		-	1	.0			1	•		1						-	5	T	-	1		1	+	5	5
Carolina Wren		-	-				-	-			1	1	2	1	1	1	1		2	2	1	1	1	1	1		-	-	5 15	5 15
		•	-	0	^	_	<i>г</i>	-	10		1	0	2	1	-	1	1	-	2		1		1		40	^	40	_		
Blue-gray Gnatcatcher	7	2	7	9	9	5	5	5	10		8	8	8	9	13		6	7	10			4	11	9	12	6	10		210	432
Golden-crowned Kinglet															2	9	9	3	4	3	2	4	13	25	10	20	22	6	132	132

															ctol														TOTAL	TOTAL
Date	1	2	3	4	5	8	9				_									23					-	-		31		Season
Nbr Unique Checklists	3	2	1	1	1	3	2	4	3	1	2	5	22	32	26	29	18	20	51	26	16	12	21	16	12	25	15	3	372	425
Ruby-crowned Kinglet	15	3	8	11	11	12	18	6	8	3	12	20	15	11	36	20	21	10	19	4	6	6	85	45	45	11	45	14	520	562
Eastern Bluebird															2			1											3	3
Gray-cheeked Thrush																													0	1
Swainson's Thrush												1	1		2						1		1						6	11
Hermit Thrush											1		1	1	9	1					1	1	6	1		2	1	3	28	28
Wood Thrush					2	1			1	1			1		1		1		1	1	1	1		1	1	1		-	15	17
American Robin																		1					2				2		5	5
Gray Catbird			1	1			12	2	2	2	5	2	3	2	5	1	1	1	3		2			1	2	2	1		51	55
Brown Thrasher	2		2	2	2	3	3	1	4	1	4	4	2	2	2	3	9	2	3	3	2	2	1	2	3	3	3	1	71	90
Chipping Sparrow															1								1			1			3	3
Clay-colored Sparrow																			1										1	1
Field Sparrow																			-				2		1		1		4	4
Dark-eyed Junco															2								-	2					4	4
White-throated Sparrow									1	-					-				1		1			-					3	3
Song Sparrow									· ·										2		•		1						3	3
Lincoln's Sparrow							1						1	2	4	6	6		1	3			2	3		1	1		31	31
Swamp Sparrow		-			-	-	<u> </u>	-	-	-	-	-		1	2	5	5	5	4	4	1	1	2	4	3	15	6	-	53	53
Yellow-breasted Chat	1	-						-	-	-	-				~		5	5	-	(1)	-	-	~	-	0	10	0		1	28
Orchard Oriole	1																			(')									0	15
Baltimore Oriole	1	-			-			-	-						1			1	1	1				1				-	5	50
Ovenbird					1	1						2		1	3	1	1	•	1	1				1					13	20
Worm-eating Warbler					1	1						2		1	(1)	1	1		1	1				1					0	8
Louisiana Waterthrush															(1)														0	9
Northern Waterthrush	1								1		1	(13)	1	1	1					1						1			8	9 40
	1	1			1			4	1		2	· ,	3	4	4	10	6	6	4	2	2	F	2	F	2	10	4		0 78	40 81
Tennessee Warbler	_	1			1			1	-		_	2				10	6	-	4		2	5	3	5		-		_	-	-
Orange-crown. Warbler					4	4	1	1	1	4	4	2	2	2	3	2	2	4 5	6	2	2	1	6	5	1	4	4	2	57	57
Nashville Warbler					1	1	1	1	6	1		1	1	1	6	1	3	5	2	2	1	1	3	1		2	2		43	47
Mourning Warbler		1																											1	17
Kentucky Warbler				~	_	~	_		_	_		_			_		40		_	•	~	_		•		-			0	10
Common Yellowthroat	1		_	2	2	2	6		8	2		8	4	4	5	4	10	4	5	6	2	2	4	3	1	5	1	1	92	101
Hooded Warbler	1	1	2	1	40	2	2	1	1		-		•	2	1		_	~				_		1					15	67
American Redstart	6	1	4	8	13			1	8	1	5	4	3	3	2	1	3	3	4	1	1	2	0	1	1	1	1		90	131
Northern Parula	2	1		1	3	2	4	5	8	2	1	5	6	10	7	6	1	6	3	2	2	1	2	1	1	4	2		88	99
Blue-winged Warbler	I					~	_					_	•		_	~	•					_							0	12
Black-and-white Warbler	7	2		3	4	2	5	1	4	1	4	5	2	4	5	2	3	2	3	1	1	2	1	1	1	1	1		68	191
Prothonotary Warbler						_	_				_			_			<u> </u>			<u> </u>									0	31
Magnolia Warbler	5			7	8	5	7	4	12	2	6	9	4	3	3	1	1		1	1				1		2	1		83	99
Chestnut-sided Warbler					1	1	1	1	2					1		1	1									_			9	9
Bay-breasted Warbler								1	1					1	2			2	1							2			10	10
Blackburnian Warbler														1		1						1							3	16
Yellow Warbler								1					1			1	1			1									5	79
Black-throated Blue																														
Warbler														1				1						2		1	1		6	6
Palm Warbler												2	1	1	1	4		1	4	12			2	1	1	1	3		36	36
Pine Warbler															6	1	1			4	1	1		3		2	2		21	21
Yellow-rumped Warbler			(1)												8	5	11	1	2	1			4	5	1	3	8	1	50	50
Yellow-throated Warbler	1														1	1	1												4	7
Prairie Warbler																													0	5
Black-throated Green																														
Warbler					1		2		3	1		2			7	5	3	3	1	1	1	3	3	2	1	2	2		43	49
Canada Warbler														2												(3)			2	95
Wilson's Warbler	3		2	2	3	3	5	2	8		2	6	5	2	9	3	5	4	4	5	4	2	4	4	3	7	6	1	104	130
Summer Tanager	1											2	1						1	1				1		1	1		9	12
Scarlet Tanager	1															1			1					1		2			5	6
Rose-breast.Grosbeak	1					6			2			1			1		1	1		1	1					1			15	15
Blue Grosbeak	1			4	3	4	2	6	3			2	1	2	2	2	1	3			1	1	1	1		1	1		42	46
Indigo Bunting	3			-		15			-	-	-	18		6	8	6	3	2	5	8	2	7	2	1	2	4	1	-	153	163
Painted Bunting	ľ	-				1		ŕ		-	-		Ĵ			5	5	-			-		-	-	-	r	-	-	1	32
Dickcissel	1	-			-	1	-	-	-	-	-	-		1	1			1		2			-		1	1	2	-	10	10

Observers Submitting Checklists for Sabine Woods During Fall 2022 Migration

T. Jay Adams, Rohit Agarwal, Megan Ahlgren, Wayne Alford, Michael Allen, Diana Alvarez, Brian Anderson, Meredith Anderson, Keith Andringa, Marie Asscherick, Mike Austin, Margaret Avard, Jamie B Wagner, Kenneth Bader, Noreen Baker, Ellen Baker-Tarbox, Jeremy Ballard, RJ Baltierra, Robin Baranowski, Kate Baumbach, Mary Ann Beauchemin, David Bell, Steven Berenzweig, Scott Berglund, J Berner, Brian Berry, Sara Bettencourt, Chris Bick, Kelsey Biles, Peter Billingham, Gary Binderim, Seth Blitch, David Booth, Justin Bosler, Elle Bow, Stephanie Bowers, Van Bowersox, James Bozeman, David Bradford, Dan Brooks, Alida Brown, Jimmy Bryan, Chris Butler, Mel C, Kris Cannon, Skip Cantrell, Karen Carbiener, Nate Carley, Lorie Carnes, Karen Carpenter, Madeleine Chaisson, Carrie Chapin, Carrie Chapin, Charlotte Chehotsky, Bryon Clark, Aeris Clarkson, Daniel Clavijo, Kevin Cochran, Dan Coleman, Ned Coleman, Anthony Colicci, Carlton Collier, Fred Collins, Greg Cook, Michael B. Cooper, Jeff Corcoran, Bryan Cotter, Nathan Cowan, Tina Cullins, Tony Dang, Annette Daughdrill, Chuck Davis, Bonnie deGrood, Ric Derdevn, Drew Dickert, Andrew Dietrich, Dimitris Dimopoulos, Robert Doe, Dave Dolan, Jeremy Dominguez, BJ Dooley, David Drake, Betty Dunn, Dennis Durkee, Matt DuRoss, Shannon E, Wyatt Egelhoff, Deb Eiger, Bill Eisele, Shelli Ellerbe, John Faber, Paul Fagala, Evan Farese, Frank Farese, Margaret Farese, Eric Faria, Lance Felber, Charles Fischer, Doug Fishman, Cameron Fiss, Bob Foehring, Orlando Fonseca, Pamela Ford, Ross Foreman, Phyllis Frank, Tony Frank, Iliana Freiday, Timothy Freiday, Doris Ganzhorn, Susanna Garcia, Crystal Garrett, Stephen Gast, Hank George, Hank George, Richard Goldfarb, Karen Goodger, Ethan Goodman, Cindy Goodrum, Keith Goodrum, Dan Green, Wendy Green, Jean Greenhalgh, Dean Gregory, Deanna Griggs, Gordon Griggs, Hannah Gross, Marilyn Guidry, John Hale, Hunter Hammil, David Hanson, Doug Happ, Robert Hardway, Gabe Hargrove, Greg Harrington, Ken Hartman, Julie Haug, Susan Haug, Kay Hawklee, John Haynes, Carl Haynie, Susan Heath, Thomas Hellweg, Garett Hodne, Lisa Holmes, Ann Hoover, Daniel Horton, Ben Hulsey, Eugene Huryn, Jesse Huth, Greg Jackson, Jeffrey Jackson, Cameron Johnson, Johnny Johnson, Brooks K, Kris Kalapala, Laura Keene, Mike Kinberg, Dan King, V L Kirby, Robert Knetsch, Kendra Kocab, Ann Kovich, Mark Kulstad, Annie L, Howard Laidlaw, Judson Lassiter, Laurie Lawler, Thomas Ledford, Cin-Ty Lee, Olivia Lee, Clayton Leopold, Richard Duke Liebler, Glen Lindeman, Christopher Lindsey, Brad Lirette, Terry Little, Scotty Lofland, Debbi Logan, Charles Lyon, Fred Lyons, Christy M, Ronnie Macko, Robbin Mallett, John Mariani, Linda Martin-Rust, Bill Matthews, Steve Mayes, Michael McCloy, Rodney McCollum, Mark McConaughy, Anne McCormack, Mark McDermott, Cat McGraw, Adam McInroy, Jon McIntyre, Debbie McMullen, Candy McNamee, Colette Micallef, Paul Micallef, J&C Miles, Mark Miller, Cindy Millford, Charles Minero, B Moffett, Andre Moncrieff, Tom Morris, Bruce Morrison, Suzanne Mottin, Lisa Murray, Steve Murray, Derek Muschalek, David W Nelson, Stuart Nelson, Bruce Neville, Bob Niles, Suzanne Odum, Amy Ondrus, Ellen Oneil, Pat O'Neil, Andrew Orgill, Tira Overstreet, John Park, John Parker, Jeff Patterson, Mike Perkins, Tim Perkins, Dina Perry, Isaac Phillips, Jon Piasecki, Eric Pourchot, Georgeta Pourchot, Stephen Price, Nick Ramsey, Janet Rathien, Albert Ribes, Florence Rice, John Rice-Cameron, Kenneth Rieger, James Rieman, Robert Rogillio, Steve Rogow, Lucas Rot, Sam Rutledge, David Sarkozi, Mark Scheuerman, Brady Schwab, Alan See, Paul Sellin, Jeff Sexton, Shiela Shallcross, Ross Silcock, Letha Slagle, Doug Smith, Shelley Smith, Sue Smith, Don Stanley, Bruce Stevenson, Harlan Stewart, Robert Stone, Mariah Stonestreet, Adrian Strong, Michelle Summers, Paul Sunby, Jeff Szabat, William Tarbox, Margaret Kirby Taylor, Sandi Templeton, Robert Thacker, Lila Theis, Lynn Thompson, Jane Tillman, Elizabeth Timmer, Sheryl Travis, Dean Turk, Christine Turnbull, David Vander-Pluym, Jeffrey Ward, Craig Watson, Melissa Weaver, Ron Weeks, Steve Welborn, Norman Welsh, Timothy White, John Whittle, Mike Williams, Julie Williamson, Mark Wilson, Erik Wolf, Brandon Woo, Janey Woodley, T Yarborough, Gary Yoder, Gary Yoder, Brian Young, Fred Zagst, Kay Zagst, Mike Zarella, Benjamin Zerante, Jim Zervos, Tracy Zervos, Paul Zimmermann.

Weather Radar Detection of the Arrival of Trans-Gulf Migration on Northern Gulf Coast

Sidney A. Gauthreaux, Jr.

To see if the arrival of trans-Gulf migration is being detected by weather radars along the northern Gulf Coast from Brownsville, Texas to the Keys of Florida during spring migration one should visit the University of Wisconsin web site (<u>https://www.aos.wisc.edu/weather/wxobs/Nexrad.html</u>) and select the Southeastern US region map (Figure 1). Below the map one can choose to see the latest reflectivity image (<u>https://tempest.aos.wisc.edu/radar/se3comp.gif</u>) or a loop of the last twenty reflectivity images (<u>https://tempest.aos.wisc.edu/radar/se3comp.tml5.html</u>) that show movement of echoes from weather systems, birds, and insects.

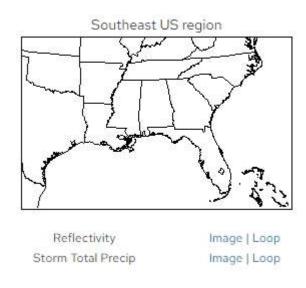


Figure 1. Map of Southeastern Region

To see a reflectivity and a velocity image from a particular weather radar site one should go to the Research Applications Laboratory's (RAL) Real-time Weather Data site operated by the University Corporation for Atmospheric Research (UCAR) at (<u>https://weather.ral.ucar.edu/</u>) and click on the "radar" image in the upper right of the 6 frames. This will produce a map of WSR-88D radar sites (Figure 2) and allow one to select various settings: Product (base reflectivity), Background (black), End Date, End Time, and Loop duration of Level II weather radar data. The base reflectivity product displays the scan closest to the 0.5° antenna elevation (Figure 3), and the composite reflectivity product displays the highest reflectivity value after all echoes from all elevation scans are compiled. A base velocity image (Figure 4) will display when the base reflectivity image is clicked.

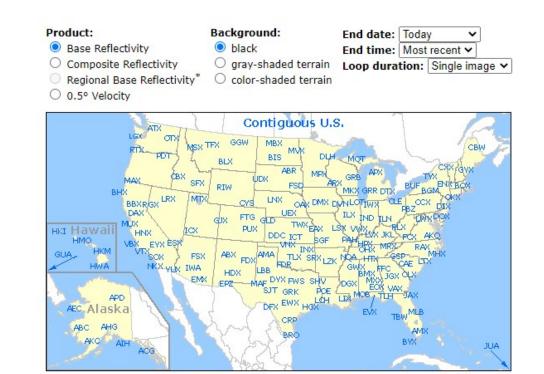


Figure 2. Map of WSR-88D weather radar stations and display settings.

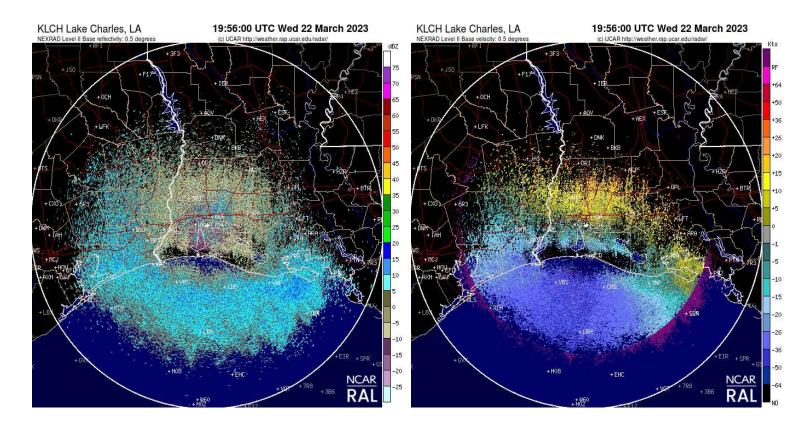


Figure 3. Base reflectivity product.

Figure 4. Base velocity product.

In the Base Reflectivity image (Figure 3) the scale of intensity is on the right side of the display, and dBZ values express equivalent reflectivity factor--a measure of the amount of radar signal scattered back to the radar receiver. The higher the value the greater the number of birds in a resolution volume. In the Base Velocity image (Figure 4) the scale is in knots (nautical miles per hour) on the right side of the image. Minus values are inbound to the radar and positive values are outbound from the radar. The displayed velocities are call radial velocities because they show the proportion of velocity directed toward or away from the radar. Movements directly toward or away from the radar represent maximum velocities (true ground speeds) while velocities perpendicular (tangential) to the radar beam show no radial velocity (no movement toward or away from the radar). On occasions when strong winds assist arriving trans-Gulf flights, radial velocities may exceed the normal range of values (Nyquist interval) and velocities above this interval will fold or become aliased. In displays of arriving trans-Gulf migrants folded inbound values may appear as outbound values (e.g., red color instead of a blue color). After processing (dealiasing) the unfolded inbound values will have the correct higher inbound values.