

Abandoned Crab Trap Removal Program

February 2020 Closure Period

Collector Data Analysis

May 3, 2020

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Sponsors and Partners



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Abandoned Crab Trap Removal Program – Feb 2020

Mid Coast Bay systems – Matagorda, San Antonio, Aransas Bays

Summary Results

Summary	<u>Traps removed</u>			<u>Program Effort 2020</u>	
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Boats</u>	<u>People</u>
San Antonio	997*	710	1249	41	108
Aransas	52	74	243	12	33
Matagorda / Lavaca	54	17	140	15	23
Note: Lavaca	0	0	87	6	11
Total	1103	838	1632	68	164

*post Harvey

Organizational Totals by Boat Captain			
SABP			409
USFW			370
Dallas Zoo / Bay Flats Lodge			241
GBRA			209
CCA Chapters			127
International Crane Foundation			125
Lavaca Bay Foundation, incl LNRA			87
TPWD			55
MBF			4
Flatworthy MANERR			5
			1632

Boats			
A Berger			180
Scott / USFW			157
A Stetter / USFW			130
J Pistone /ICF			125
Dallas Zoo / Garrett			88

Best Day		Curtis/ GBRA		61
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Detailed Results

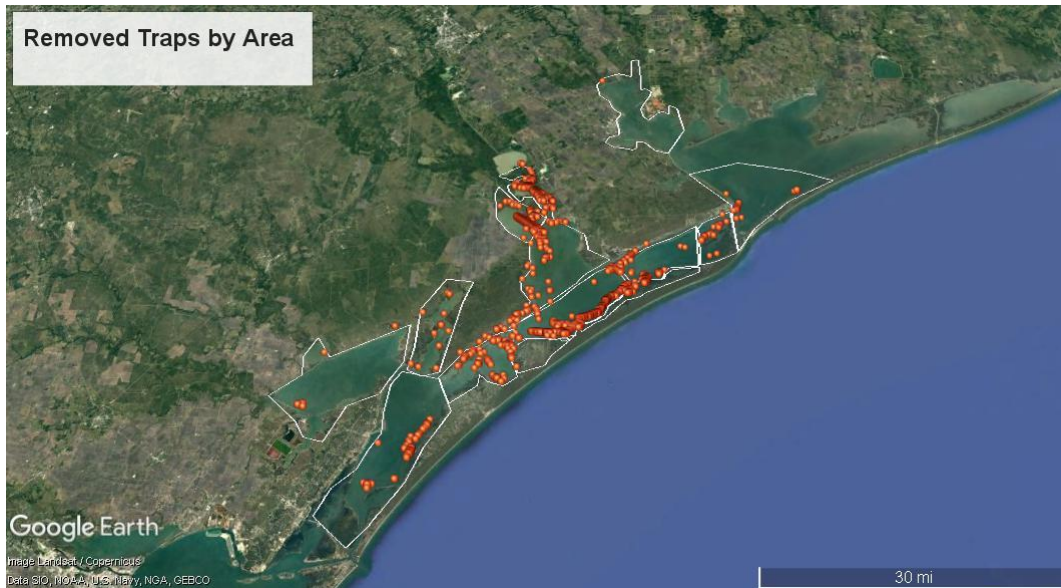
Feb 2020 Crab Trap Removal Results as of 2/2/2020												
Captain	Date	Area	Traps	Boats	# People-Total	# hours	SA Bay	Mat Bay	Aransas Bay	Deposited at:	Collector: YES or NO	Affiliation
M Barnes	Saturday 2/22	Contee to South Pass	23	1	4	6	23			POC TPWD	NO	SABP
A Berger	2/17/2020	Boggy	1	0	1	0.5		1		Seadrift Marina	YES	SABP
A Berger	2/18/2020	Mat Penn	3	1	2	2		3		Seadrift Marina	YES	SABP
A Berger	pre 2/21/20	Early PU-- 11 traps	0	1	1	2				Seadrift Marina	YES	SABP
A Berger	Sat 2/22	Big Pocket	11	1	4	7	11			POC TPWD	YES	SABP
A Berger	Sun 2/23	South pass to Cedar	37	1	4	7.5	37			POC TPWD	YES	SABP
A Berger	Mon 2/24	Guadalupe Bay	48	1	3	6	48			Seadrift Marina	YES	SABP
A Berger	Tuesday 2/25	Guadalupe Bay- Mission	53	1	4	5	53			Seadrift Marina	YES	SABP
A Berger	Friday 2/28	ES/ SA Bay Sweep	23	1	3	6	23			POC TPWD	YES	SABP
A Berger	Saturday 2/29	Powderhorn Shore	2	1	1	1		2		POC TPWD	YES	SABP
A Berger	Sun 3/1	Contee to South Pass	2	1	1	1	2				YES	SABP
D Berger	Saturday 2/22	L Jetties to Fishpond	13	1	4	5		13		POC TPWD	YES	SABP
D Berger	Sun 2/23	South Pass to Cedar	25	1	3	5.5	25			POC TPWD	YES	SABP
A Biery	Saturday 2/22	Austwell So	30	1	4	6	30			Charlies	YES	SABP
E Boyer	Saturday 2/22	St Charles Bay	10	1	2	6			10	Goose Island	YES	SABP
E Boyer	Sun 2/23	Aransas & Copano	4	1	2	4			4	Copano Bay Fishing Pier	YES	SABP
E Boyer	Sat 2/28	Copano	5	1	2	3			5		YES	SABP
C Carter	Saturday 2/22	Dewberry Island	12	1	3	3.5	12			POC TPWD	NO	CCA
C Criglar - Rockport CCA	Saturday 2/22	St Joe Island	69	3	11				69		NO	CCA
Dallas Zoo /Garret	Sun 2/23	Lagoon-Shoalwater	38	1	4	4	38			Swan Point	yes, but no sync	ZOO
Dallas Zoo / Garret	Mon 2/24	Delta Marshes	50	1	4	4	50			Swan Point	yes, but no sync	ZOO
Dallas Zoo / Perry airboat	Sun 2/23		42	1	3	3	42			Swan Point	NO	ZOO
Dallas Zoo / Perry airboat	Mon 2/24		30	1	3	3	30			Swan Point	YES	ZOO
Dallas Zoo / Tod	Sun 2/23		21	1	3	4	21			Swan Point	YES	ZOO
Dallas Zoo / Tod	Mon 2/24		60	1	3	4	60			Swan Point	YES	ZOO
B Davis	Saturday 2/22	Pringle	4	1	4	2	4			POC TPWD	not registered; met at TPWD unloading	
S Ford	Thur 2/27	Aransas & Copano	5	1	3	5.5			5		NO	FW/MANERR
Ralph Embesi	Saturday 2/22	Austwell So	26	1	2	4	26			POC TPWD	NO	CCA
GBRA - Alan / Jason	Mon 2/24	Hynes Bay	47	1	3	4	47			Austwell	YES	GBRA
GBRA - Curtis	Mon 2/24	Hog,Goff, Mission, River	28	1	4	4	28			Austwell	YES	GBRA
GBRA - Lee	Monday 2/24	Hynes	44	1	4	4	44			Austwell	YES	GBRA
GBRA - Alan / Jason	Tuesday 2/25	Hynes / Guad / Mission	12	1	4	12				Austwell	YES	GBRA
GBRA - Curtis	Tuesday 2/25	Hynes/Guad/Mission	61	1	5	61				Austwell	YES	GBRA
GBRA - Lee	Tuesday 2/25	Hynes, SABay to Intereco	17	1	4	4	17			Austwell	YES	GBRA
D Goldman	Saturday 2/22	Barroom / Blackberry	7	1	3	5.5	7			POC TPWD	NO	SABP
C Hammons	Saturday 2/22	Powderhorn Lake	18	1	4	3		18		Port Lavaca	NO	SABP
L Hewitt	Saturday 2/22	Lighthouse Cove	0	1			0			Boat Problems	NO	CCA
B Hill	Sun 3/1	Barroom / Blackberry	2	1	1	5	2				NO	SABP
D Kern	Saturday 2/22	Charlies to Steamboat	21	1	2	7	21			Charlies	YES	SABP
Lavaca Bay Foundation	Saturday 2/22	Lavaca Bay	43	3	6	4		43		Port Lavaca	?	LBF
Lavac Navidad River Authority	Thur 2/27	Lavaca River	39	2	4	7		39			?	LBF/LNRA
Lavaca Bay b Six Mile / RJ		Lavaca Bay	5	1	1	2		5			NO	LBF
Matagorda Bay Foundation	Saturday 2/22	Matagorda Bay	4	1	2			4		Palacios	NO	MBF
S Mills			3	1	2	3	3				NO	CCA
T Nguyen	Saturday 2/22	Austwell So	29	1	2	?	29			Seadrift Marina	NO	SABP
C Odell	Saturday 2/22	Bayocus / grass island	17	1	2	5	17			POC TPWD	YES	CCA
J Pistone	Saturday 2/22	Saluria, west	12	1	4	3.5	12			Charlies	YES	ICF
J Pistone	Sun 2/23	South pass to Cedar	24	1	3	7.5	24			POC TPWD	YES	ICF
J Pistone	Mon 2/24	Hynes Bay	13	1	2		13			Seadrift Marina	YES	ICF
J Pistone	Tuesday 2/25	Guadalupe Bay	46	1	3	5	46			Seadrift Marina	YES	ICF
J Pistone	Thur 2/27	St Joe Shoreline	30	1	3	6			30	Goose Island	YES	ICF
G Simmons	Sat 2/23	St Joe Island	22	1	2	13			22	?	YES	SABP
Tpwd - Troxler	Friday 2/21		40	1			28	12		POC TPWD	NO	TPWD
Tpwd - Troxler	Mon 2/24	SA Bay	15	1			15			POC TPWD	NO	TPWD
E Smith	no report											SABP
USFW - Andy(airboat)	Monday 2/24	Aransas , Mequite, Carlos	36	1	3	7			36	Refuge	YES	USFW
USFW - Andy(airboat)	Tuesday 2/25	Mesquite, Carlos, Ayers	49	1	3	7			49	Refuge	YES	USFW
USFW - Andy(airboat)	Friday 2/28	San Antonio	45	1	4	6.5	45			Refuge	YES	USFW
USFW - Colt	Tues 2/25	Mesquite	13	1	3	7			13	Refuge	YES	USFW
USFW - Jr	Monday 2/24	San Antonio	10	1	3	6	10			Refuge	YES	USFW
USFW - Scott (airboat)	Monday 2/24	San Antonio	50	1	3	6	50			Refuge	YES	USFW
USFW - Scott (airboat)	Tuesday 2/25	San Antonio	60	1	3	7	60			Refuge	YES	USFW
USFW - Scott Airboat	Friday 2/28	San Antonio	47	1	3	3.5	47			Refuge	YES	USFW
USFW - Wade (airboat)	Sat 2/22	MI Lakes	60	1	4	8	60			Hanselmans	YES	USFW
D Weynard	Saturday 2/22	Long Lake	16	1	2		16			Charlies	NO	SABP
Total Mid Coast Bays			1632	68	168		1249	140	243		1632	
		Matagorda Bay		15	23							
		Aransas Bay		12	33							
		San Antonio Bay		41	112							
Organizational Totals by Boat Captain												
SABP			409		Best Day		Curtis/ GBRA		61			
USFW			370		Best Boat		A Berger		180			
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Analysis of Trap Location



Summary of February 2020 Abandoned Crab Trap Removal Program for San Antonio Bay and adjacent waters

# derelict traps removed in 2018	1103
# derelict traps removed in 2019	838
# derelict traps removed in 2020	1632
# traps removed with site-specific data collected	1202
% traps removed with site specific data	74%
# traps removed with tags identifying owner	492
# traps removed with float but without identifying tags	572
# traps removed with no float attached	137



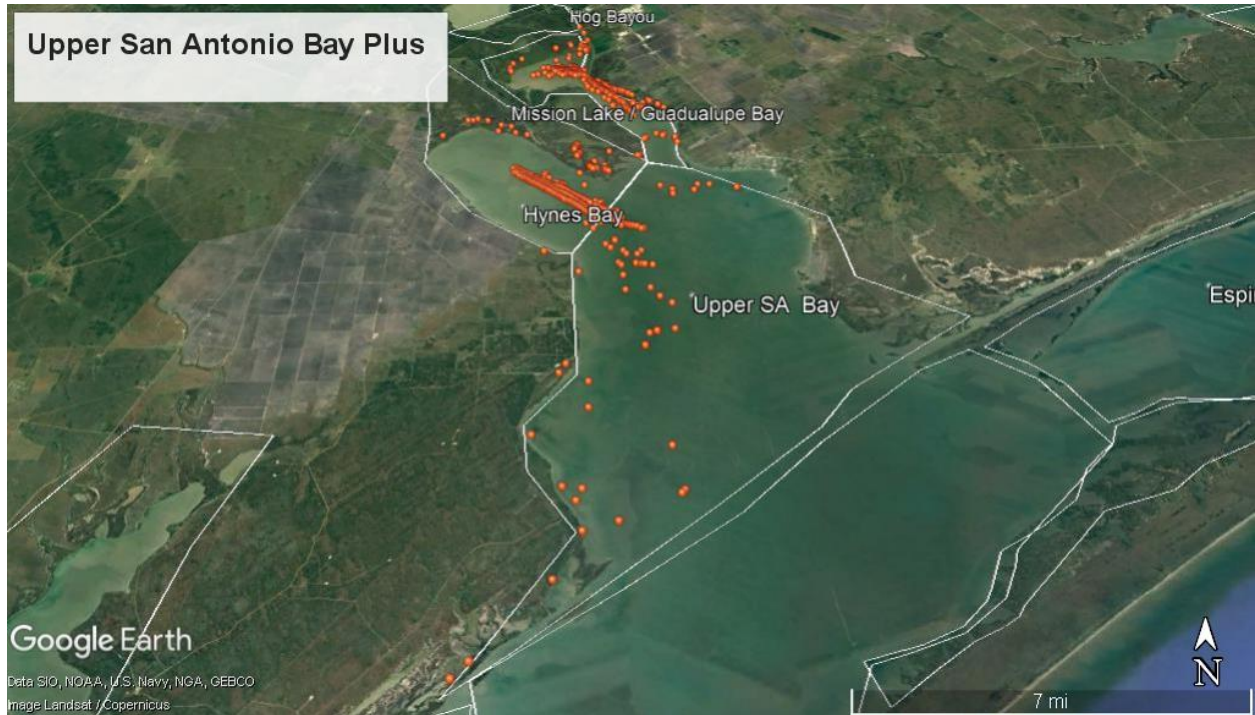
Location Analysis from counting Google Earth locations				
Area	<u>Total</u>	<u>Open Water</u>	<u>Shoreline</u>	<u>Marsh</u>
Matagorda	19	4	15	0
E Espiritu Santo	27	0	27	0
W Espiritu Santo	26	6	20	0
L San Antonio	335	53	282	0
U San Antonio	75	65	10	0
Guadalupe/Mission	236	188	44	4
Hog Bayou	5	0	0	5
Hynes	185	150	11	24
Mesquite	84	20	61	3
Aransas	53	12	32	9
W Matagorda Lakes	38	0	0	38
E Matagorda Lakes	101	0	0	101
St Charles	10	0	10	0
Copano	7	2	5	0
Lavaca	1	0	1	0
	1202	500	518	184
		42%	43%	15%

Observations:

- The largest location of derelict traps is in Lower San Antonio Bay—dominated by 282 traps along the 15 miles of Matagorda Island shoreline from South Pass to Ayres Point.
- The second hotspot is the 188 traps in open water in Guadalupe Bay and Mission Lake.
- The third hotspot is Hynes Bay with 150 traps in open water. Additional traps were recovered just south in Upper SA Bay.
- The recovered traps are about equally split between open water and shore. Possible reasons for those left in open water need to be addressed in discussions with Commercial Crabbers: Abandoned in place? Wind blown off the laid trap line? Missed in pre-closure pickup, weather or tide issues prevent pickup, crabber's mechanical or schedule problems? Others?
- 15% of the traps were in the Marsh. Low winter tides make retrieval difficult during February. Matagorda Island Marsh is under USFW jurisdiction and ostensibly closed to crabbing.

Note: this analysis is based on manual count of trap location in Google Earth with the author's judgments made on whether the trap was on shoreline, in open water/retrieved by boat, or in the Marsh (considerations: location on map, retrieved by boat or on foot?).

Location Hot Spots









Analysis of Trap Owner Data

Ownership of Removed Traps	#	%
Crabber #1	132	
Crabber #2	100	
Crabber #3	53	
Crabber #4	44	
Crabber #5	27	
Crabber #6	13	
Subtotal	369	31%
24 Crabbers with less than 10	122	10%
Total identifiable traps	491	
Unknown Ownership		
No Float or tag on trap	136	11%
Tag illegible	11	1%
Float on Trap but no tag	233	19%
Data Not Recorded	331	28%
Traps in Collector	1202	100%
% of total traps removed in Collector Database		74%
Permitted traps to Calhoun County Crabbers	6900	
Traps from San Antonio & Espiritu Santo Bay	1249	
Traps from Lavaca and Matagorda Bay	140	
	1389	
% Dereliction	20%	

Observations

- Ownership data available only on 491 traps , or 41%, of the 1202 traps in the data base.
- 6 crabbers lost more than 10 traps and account for 31% of identifiable traps. (Note: a license allows 200 traps to be run; a crabber may have up to 3 licenses, or 600 traps).
- Only 11% of recovered traps in database do not have a float attached.
- A significant number—233 or 19%-- of traps that have a float do not have a tag. This untagged statistic is likely understated since another 331 traps had data collection deficiencies that prevents firm conclusions regarding presence of tags.
- A commercial license allows a crabber to operate anywhere in the State. Calhoun County residents can operate 6900 traps. With the assumption that the 1389 traps removed from Calhoun County waters are from those residents, the dereliction rate is 20%

Analysis of Trap Content Data

Trap Content	#	%
Traps with Blue Crabs	537	45%
Traps with Stone Crabs	128	11%
Traps with Fish	60	5%
Empty	321	27%
Not recorded	280	23%
Total Traps in Collector	1202	
Diamondback Terrapin	2	0.2%
Birds	1	0.1%

Live Crabs Released (extracted from comments where reported)			
	#	# traps	Avg per trap
Blue Crabs	1018	227	4.5
Stone Crabs	288	54	5.3

Observations:

- A little less than half of all trap removed had crabs or fish, or both, entrapped.
- Data was not collected to quantify the entrapment. However, several volunteers made comments that stated the number of live crabs released. Analysis of these comments yields the following: 1018 blue crabs were noted in 227 traps and 288 stone crabs from 54 traps -- or about 5 crabs per trap.
- Additional analysis could be conducted to differentiate between traps at shoreline / ashore vs traps in deeper water.
- Note that 2 diamondback terrapins were released – both still alive and that one trap contained a dead bird.

Other Analyses

Trap Removal from Boat / by foot

Trap Removal	#	%
From Boat	610	51%
On Foot	335	28%
Not Recorded	257	21%
Total Traps in Collector	1202	

Observations:

- This statistic is directly from Collector data. The location analysis arrived at 43% of traps on shoreline + 15% in Marsh, most of which was pickup up by airboat—total 40%. Need to adjust for airboat retrieved traps and consider delineating next year.

Float Present?

Float Present?	#	%
Yes	788	66%
No	146	12%
Not recorded	268	22%
Total Traps in Collector	1202	