

POPULATION SURVEY OF THE INTERIOR LEAST TERN
ON THE MISSISSIPPI RIVER
FROM
CAPE GIRARDEAU, MISSOURI
TO
BATON ROUGE, LOUISIANA

2008

By

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On and between July 26 and August 1, 2008, Kenneth H. Jones, Associate Professor of Biology at Dyersburg State Community College, under contract with Choctaw Transportation Company, conducted a survey of interior Least Tern (*Sternula antillarum athalassos*) nesting colonies along the Mississippi River. This annual survey is performed for the Memphis District Army Corps of Engineers and assists the U.S. Fish and Wildlife Service with its census in determining population size and distribution of the Interior Least Tern. This survey was the 24th consecutive annual count since the surveys were initiated in 1985 by the Army Corps of Engineers. The survey area extended 777 miles from Cape Girardeau, Missouri (Upper River Mile 53) to Baton Rouge, Louisiana (River Mile 230) (Figure 1). In prior years three types of surveys were performed: towboat, aerial and small boat (Table 4, Figure 2). The towboat surveys were discontinued in 1995 as were the aerial surveys in 1997 when it became obvious that of the three, the small boat survey yielded the highest and most accurate counts. Past years' surveys terminated about 7 miles downstream of Vicksburg, Mississippi because early aerial surveys in 1986 indicated a scarcity of sandbars and relatively few terns downstream of Vicksburg. Beginning in 2004 the survey was extended to Baton Rouge, Louisiana in order to more thoroughly access the entire range of the Least Tern population on the Lower Mississippi River.

From 1985 through 1996, Least Tern surveys were conducted by John Rumancik, fishery and wildlife biologist from the Memphis District Army Corps of Engineers. Since 1997 the surveys have all been conducted by Kenneth Jones, Associate Professor of Biology, Dyersburg State Community College. Observers and crew members of this year's survey included John Rumancik, biologist with the Memphis District Corps of Engineers. Experienced counters from past surveys helping on this year's count included Mark Campen, Dennis and Regina Davin, Zack Fowlkes, Ken and Wanda Jones, and Chris Maloney.

This year's survey yielded a total count of 12,183 Least Terns and 59 nesting colonies, fewer colonies than last year's survey, which was 96, but much higher total numbers. Fifty-four colonies were identified based on the presence of eggs and/or chicks (Tables 1 and 2). Eight colonies were identified based on the presence of a large number of nest scrapes, adult behavior and other indicators of likely reproductive effort such as wetting breast feathers, sitting inland, carrying fish or intense mobbing of intruders. The largest colony was located at St. Frances Bend (RM 672.5) with 520 adult terns counted. Other large colonies included Kentucky Point Dikes Upper (RM 884) with 509 birds, Basket Bar Dikes Upper (RM 698.5) with 380, and Below Prentiss Dikes (RM 578.0) with 289 Least Terns. The smallest colonies were at Ashport

Goldust Dikes Lower (RM 787.0), Kangaroo Point Dikes Lower (RM 647.5), and Jackson Point (RM 329.0) with just 22, 42 and 46 birds.

Numbers of adult and juvenile Least Terns were recorded on data sheets developed by the Corps and based on the Cornell University Bird Registry Form. One data sheet was used for each observation with the following noted: date, time, river mile, latitude/longitude (decimal degrees determined from GPS), number of adult terns, presence of juveniles, chicks and eggs, number of nests observed and eggs or chicks in each, locations of sandbars, substrate, distance from vegetation and type, weather conditions, nearest river gage readings, and other notes on bird behavior, signs of predation or other disturbance. Nest counts were determined both by direct observation of scrapes containing eggs (empty scrapes were not counted) or observations of terns setting inland during waterline drift counts. On the data sheets egg counts are listed with number of nests followed with parentheses showing number of eggs (e.g. 1(1) 2(2) 3(3) would mean 1 nest with 1 egg, 2 nests with 2 eggs and 3 nests with 3 eggs). Foraged fingerling fish dropped within the colony were identified and/or collected. Colony locations were marked on 1998 Flood Control and Navigation Maps of the Mississippi River, 61st edition, USACE. Data sheets and colony locations are found in Appendix A.

The average number of adult terns per colony was 102, with colony sizes ranging from as little as 13 adults to as many as 633. The numbers of eggs per nest ranged from 1 to 3 and many nests were associated with debris wrack lines or in close proximity to small, random pieces of drift. Many adults were observed utilizing other habitats often miles away from the nearest colony locations. These habitats included both still and running water of all depths in the channel, behind dikes, in back chutes, tributary mouths, and fast current against revetted banks on the outside of river bends.

The boat survey was initiated July 26, 2008, with the river stage at Memphis, Tennessee at 10.3 and just starting to rise after a previous fall of 15 feet from a rare, summer, high-water crest of 25.2 feet, Memphis gauge, June 15 (Table 3). For the upper reaches of the survey the river was on a slow rise, but at Helena and points downstream it was on a slow fall at the time of the survey. Within 10 days however a 6 foot rise inundated those colonies located on low elevation bars. The survey proceeded downstream during daylight hours from Cape Girardeau, Mo., to Baton Rouge, La., at an average pace of 111 miles per day.

Upon spotting a likely colony site, the boat would head for the greatest concentration of terns, then approach the bar as close as shallow water levels would allow, cut power, and motor slowly with the current along the perimeter of the bar. Two or more observers would count birds using 7x35 or 8x40 binoculars. One observer counted terns resting along the waterline, while another observer counted birds in the air or sitting inland, presumably on nests. Usually after this preliminary count, and depending upon the sand bar configuration, the boat would go back and beach near the greatest concentration of terns and one or more observers would then walk toward the perceived center of the colony to find evidence of nesting activity, while others would fan out in different directions to traverse more of the colony area. This technique, counting as the boat proceeds downstream (hereafter referred to as a “perimeter count”), usually produced higher counts than just walking on the sand bar to the colony’s center to induce mobbing (hereafter referred to as a “flush count”). It was particularly effective at colonies where terns

were dispersed for several miles along the waterline and the sand bar was low enough that the observers could see across it. However, at many sites, especially those with back chutes with shores not visible from the boat on the channel side, it should be construed that many terns were not seen and the counts were conservative. All individual counts were recorded privately so as not to influence other crew members' observations, then compared and counts discussed. All individual observer counts were recorded on data sheets. The highest number was discarded and the middle number was recorded as the total count, unless two or more observers had identical high counts. In most cases all observers were within 10% or less of the recorded count.

The presence of eggs or chicks was considered confirmation of nesting activity. Intense mobbing, wetting of breast feathers, and the presence of fresh scrapes were also considered to indicate an active nest colony at the 8 sites where no eggs or chicks were observed. Once a colony was located, several counts were made, both by observers stationed at the boat and those penetrating the colony. Seventeen colonies were found to contain fledged juveniles. Not all colonies were walked by members of the survey party, especially if the colony was widely dispersed and easily observed from the boat. In those instances, even though no eggs were observed, terns seen sitting higher up on the sand bar, away from the waterline, were counted as indicative of number of nests. This assumption produced the larger nest count totals up to 87, as shown in Table 1.

As with previous surveys, observations within the colony were performed as quickly as possible (< 15 minutes) to minimize the disturbance time and limit the exposure of any chicks and eggs to the intense summer heat. Though mobbing behavior was often intense upon the observers first entering the colony, it ceased almost immediately as soon as the observers retreated. The highest counts usually occurred during the initial waterline count or upon the first few minutes of mobbing when most, if not all, of the adults in the colony would join in to dissuade the intrusion. Nesting adults, nest scrapes, and numbers of nests with eggs and chicks were recorded as well as other features of the habitat. Twelve thousand one hundred eighty-three (12,183) Least Terns were recorded at 113 locations (Table 1, Figure 1). Of these, 59 sites were identified as nesting colonies with 10,050 adults, 39 sites as resting bars only with 1,945 adults, and 15 observations were of 188 birds that could not be associated with colonies, either flying over feeding areas or in transit along the river.

As with previous years, the typical tern nest colony was located on an unattached (surrounded by water) sand and/or gravel bar usually associated with a dike field. Those colonies that were attached were located on very large, remote point bars, ½ to 1 mile in width, and often 2 to 4 miles in length. Isolation and remoteness appeared to be the main selection criteria. The larger colonies were hundreds of acres in size, while some of the smallest were just a few acres or less.

The locations of the colonies as indicated on the 1998 Navigation Maps (Appendix A-I) should be viewed as only approximations based on river mile markers visible from or nearby the sites. Since many sand and gravel bars do move or change shape often, such features on the maps do not necessarily correspond to the actual conditions at the time of the survey (hence the occasional colony indicated in open water). For exact colony locations the GPS latitude/longitude coordinates (decimal degrees) are the most accurate and should be referenced

as occurring at the water's edge on the channel side of the colony (except when specified otherwise on the data sheets). Most colonies were located on the high centers or distributed evenly across the bars showing no preference for river vs. chute sides, though there were some exceptions.

The colonies' proximities to the nearest water (least distance from any nest with eggs to the waterline) varied from 10 to 800 feet and averaged ~233 feet. Though some colonies were densely populated, with scrapes occurring within a few feet of each other, many more colonies were extremely dispersed with nests occurring hundreds of feet apart and the colony extending as far as a mile or more across the larger sandbars. Major vegetation was absent or far removed (>300 feet) from 52 colony sites, but 10 did have sparse stands of sapling Cottonwoods (*Populus deltoids*) and/or Black Willows (*Salix nigra*) within 300 feet of active nests. The other colonies with vegetation had only very sparse, recently emerged grasses, sedges and forbs in small patches within the colony. Most open water within 2 miles of active colonies appeared to be utilized by foraging terns. These sites included swift current on revetted outside bends, slack water between dikes, chutes, mouths of tributaries and even mid-channel currents.

Recent evidence of predation on terns, their eggs or chicks was noted at 3 colony sites, 2 by coyotes (or dogs) and the other by an avian predator. The presence of coyote, and/or dog tracks was noted at 9 sites and still suggests that coyotes and/or feral/pet dogs are one of the more common predation threats to nesting Least Terns along the Lower Mississippi River. Of 96 colonies, only 3 had track evidence of recent intrusion by humans on foot, by boats and ATVs. In 1 colony there were day campers present at the time of the survey date, but with most limiting their activities to the water line.

Besides Coyotes (*Canis latrans*) other potential predators, or their sign, seen near colonies during this year's survey included American Crow (*Corvus brachyrhynchos*), Bald Eagle (*Haliaeetus leucocephalus*), Egrets (*Casmerodius*, *Egretta*, *Bubulcus*), Great Blue Heron (*Ardea herodias*), Mississippi Kite (*Ictinia mississippiensis*), Red-shouldered Hawk (*Buteo lineatus*), Red-tailed Hawk (*Buteo jamaicensis*), and Turkey Vulture (*Cathartes aura*).

Other bird species observed on the sand bars or in close proximity to Least Tern colonies included Anhinga (*Anhinga anhinga*), Belted Kingfisher (*Megaceryle alcyon*), Black-necked Stilts (*Himantopus mexicanus*), Black Tern (*Chlidonias niger*), Canada Goose (*Branta canadensis*), Caspian Tern (*Sternula caspia*), Cattle Egret (*Bubulcus ibis*), Common Grackle (*Quiscalus quiscula*), Double-Crested Cormorant (*Phalacrocorax auritus*), Fish Crow (*Corvus ossifragus*), Forster's Tern (*Sternula forsteri*), Great Blue Heron (*Ardea herodias*), Great Egret (*Casmerodius albus*), Indigo Buntings (*Passerina cyanea*), Killdeer (*Charadrius vociferous*), Little Blue Heron (*Egretta caerulea*), Mallard Duck (*Anas platyrhynchos*), Prothonotary Warbler (*Protonotaria citrea*), Purple Martin (*Progne subis*), Red-winged Blackbird (*Agelaius phoeniceus*), Rough-winged Swallow (*Stelgidopteryx serripennis*), Sandpipers (*Calidris sp.*) Snowy egret (*Egretta thula*), Tree Swallow (*Tachycineta bicolor*), White Ibis (*Eudocius albus*), and White Pelican (*Pelecanus erythrorhynchos*).

Fingerling-size fish of Freshwater Drum (*Aplodinotus grunniens*) shad (*Dorosoma*), Silver Carp (*Hypophthalmichthys molitrix*), Smallmouth Buffalo (*Ictiobus bubalus*), White Bass

(*Morone chrysops*), and other fish species were found in colonies and are presumed to have been dropped by foraging adults.

This year's survey was the sixth to cover the additional 200 river miles below Vicksburg, Mississippi and yielded a total count that was up from the 2007 count by roughly 24%. One reason for this record high count could be due to the survey's taking place so late in the breeding season that considerable numbers of juveniles were included in the adult counts. Also, the number of available colony sites were down compared to previous years due to this year's higher than normal summer river stages which made unavailable those sand bars with lower elevations.

Table 1: Least Tern Survey - July 26 - August 1, 2008 - Mississippi River
Cape Girardeau, Missouri, to Baton Rouge, Louisiana

River Mile	Mississippi River Location	State	Lat. N	Long. W	Least Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
UR 50.0	Marquette Island	IL	37.2734	89.5246	21		0
UR 30.8	Bumgard Island	IL	37.0416	89.3757	102	*	23
UR 3.0	Greenfield Bend	IL			1		0
946.0	Island #1 Dikes	KY	36.8882	89.1163	302	C*	15
931.5	Wolf Island Bar	KY	36.6995	89.1498	177	C*	7
924.8	Beckwith Bend	KY			4		0
908.0	Kelly landing	KY	36.5396	89.4005	7		0
895	Hotchkiss Bend Dikes	MO			1		0
884	Kentucky Point Dikes Upper	KY	36.51784	89.5498	509	C*	87
883.2	Kentucky Point Dikes Lower	KY	36.5076	89.5433	52	C*	26
877	Marr Towhead	TN	36.4236	89.5393	18		0
872.5	Stewart Towhead Dikes Upper	MO	36.35763	89.51528	176	C*	12
870.5	Stewart Towhead Dikes Lower	MO	36.34634	89.52654	60	C*	6
864.5	Below Cherokee Dikes	TN	36.3316	89.6174	224	C*	8
854	Chute of Island 14	MO	36.2491	89.5712	202	C*	18
846.3	Opp. Caruthersville Dikes	TN	36.19892	89.64358	25		0
837	Island #18 Towhead Dikes	TN	36.10308	89.63945	188	C*	9
830	Island #20 Dikes	TN	36.0372	89.6944	131	C*	12
827.0	Head of Island #21 Dikes	TN			29		0
825.6	Island #21	TN	35.9629	89.7103	51	C*	6
819.0	Wrights Point Dikes	AR	35.9094	89.6346	96	C*	1
811.5	Below Tamm Bend Dikes Upper	TN	35.9069	89.7452	39		0
807.3	Nebraska Point Dikes	TN	35.86	89.7606	337	C*	20
793	Ashport Goldust Dikes Upper	AR	35.7464	89.8288	157	C*	18
792.3	Ashport Goldust Dikes Lower	AR	35.7451	89.8424	22	C*	5
787.0	Keyes Point Dikes	TN	35.71275	89.9372	85	*	0
781.5	Below Plum Point Dikes	TN	35.6527	89.8951	109	C*	7
778	Sunrise Towhead Chute	TN			120		0
771	Randolph Dikes	TN	35.5259	89.8987	478	C*	20
766.5	Below Richardson Landing Dikes Upper	TN			1		0
763	Below Richardson Landing Dikes Lower	TN	35.506	90.0076	54	C*	4
760.5	Cedar Point	TN	35.4355	90.0018	140	C*	4
757.5	Densford Dikes	TN			18		
SUBTOTAL					3,936		

Table 1 continued: Least Tern Survey - July 26 - August 1, 2008 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River	Least						
Mile	Mississippi River Location	State	Lat. N	Long. W	Terns	Nests	
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:	Nests:	
755.0	Densford Bar	TN	35.3902	90.0703	75	C*	8
743.7	Above Loosahatchie Dikes	TN	35.2515	90.09205	38		
740.5	Sycamore Chute Dikes	AR	35.20767	90.07191	32		0
733.0	Engineer Bar Dikes	AR	35.12323	90.10361	18		0
729.5	Vice Presidents Island #46	TN	35.1264	90.1594	25		0
725.0	Dismal Point Dikes	AR	35.0691	90.1838	18		0
716	Cow Island Bend Upper	MS	35.0074	90.2937	91	C*	14
714.5	Cow Island Bend Lower	MS			7		
706.5	Norfolk Star Revetment	MS	34.8981	90.2575	108	C*	1
705	Seyppel Dikes	AR	34.8911	90.2717	245	C*	18
703	Pickett Dikes	AR	34.8757	90.305	107	C*	3
700.5	Porter Lake Dikes	AR			16		0
698.5	Basket Bar Dikes Upper	AR	34.8391	90.3786	380	C*	10
697	Basket Bar Dikes Lower	AR			20		0
693.5	Commerce Dikes	MS	34.8145	90.4572	109	*	1
687.0	Mhoon Bend	AR	34.73875	90.45414	226	*	7
680.0	Bordeaux Point Dikes	MS	34.73383	90.56013	155	C*	8
676.5	Below Walnut Bend Dikes	AR	34.6753	90.5742	104	C*	2
672.5	St. Francis Bend	MS	34.6241	90.5832	520	C*	110
667.5	Prairie Point Dikes	AR	34.5625	90.5536	144		0
661.5	Helena Reach	MS	34.51256	90.58333	47		0
656	Montezuma Towhead Dikes	AR	34.4097	90.5917	47		0
651.2	Friars Point Dikes	MS	34.3757	90.6618	91	C*	6
648.5	Kangaroo Point Dikes Upper	AR	34.3671	90.7004	23		0
647.5	Kangaroo Point Dikes Lower	AR	34.3677	90.7163	42	C*	3
643.4	Old Town Bend	MS	34.3428	90.7632	47		0
640.5	Island #62 Dikes Upper	AR	34.3084	90.7389	28		0
637	Island #62 Dikes Lower	AR			5		0
629.5	Island #64 Dikes	AR	34.2178	90.8495	196	C*	25
625.0	Sunflower Cut-Off	AR	34.1728	90.8991	238	C*	10
623.0	Below Ludlow Dikes	AR	34.1613	90.9277	22		0
620.0	Island #67 Dikes Upper	MS	34.126	90.9528	180	C*	18
619	Island #67 Dikes Lower	MS	34.1109	90.9436	160	C*	11
616.0	Below Knowlton Dikes Upper	AR	34.0811	90.9081	69		0

SUBTOTAL

3,633

Table 1 continued: Least Tern Survey - July 26 - August 1, 2008 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River Mile	Mississippi River Location	State	Lat. N	Long. W	Least Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
612	Below Knowlton Dikes Lower	AR	34.029	90.8975	49	C*	18
608.0	Island #70 Dikes Upper	MS	34.0227	90.9657	82		0
606.2	Island #70 Dikes Lower	MS	34.0153	90.9897	27		0
603.0	Henrico Dikes	MS	33.9945	91.0418	98		0
599.5	Smith Point Dikes	MS	33.9572	91.0799	210	C*	11
589.5	Terrene Dikes	MS	33.8415	91.0632	167	C*	7
583.5	Malone Field Dikes	AR	33.7491	91.0499	206	C*	10
578.0	Below Prentiss Dikes	MS	33.7539	91.1285	289	*	0
573.5	Caulk Neck Cut-Off	AR	33.7115	91.1652	89	C*	0
568.6	Catfish Point Dikes	MS	33.6592	91.2003	171	C*	10
563	Choctaw Bar Island	AR	33.6339	91.1573	151	C*	0
559	Choctaw Bar Island	AR	33.5836	91.167	166	C*	0
554.5	Huntington Point	MS			3		0
541	Leland Neck Dikes	MS	33.397	91.1087	133	C*	0
539.0	Tarpley Cut-Off Dikes	AR			1		0
534.0	Island 84 Dikes	MS			270	C*	40
528.3	Refuge Dikes	MS	33.26653	91.12264	65	C*	4
526.5	Aconia Chute Dikes	AR			26		0
518	Island #86 Dikes	AR	33.1291	91.10169	147	C*	7
514.0	Leota Dikes	MS	33.09132	91.16353	166		0
508.5	Cracraft Lower Dikes Upper	AR	33.02516	91.15446	60		0
507.5	Cracraft Lower Dikes Lower	AR			19		0
503.5	Corregidor Dikes	MS	32.95736	91.14347	243	C*	35
499	Wilson Point Dikes	LA	32.9435	91.0833	149		0
495.4	Cottonwood Landing	LA			52		0
491.5	Baleshed Landing Dikes	MS	32.8417	91.1278	83	*	0
482.5	Ajax Bar Dikes Upper	MS	32.73746	91.11895	151	C*	12
480.8	Ajax Bar Dikes Lower	MS	32.73697	91.10903	95	C*	3
475	Point Lookout Dike	LA	32.71685	91.05885	75		0
470	Arcadia Point Dikes	MS	32.65489	91.1406	61		0
461	Willow Cutoff Dikes	LA	32.5361	91.1006	84	*	10
447	Marshall Cutoff Dikes	LA	32.40516	901.00311	63		0
SUBTOTAL					3,651		

Table 1 continued: Least Tern Survey - July 26 - August 1, 2008 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River Mile	Mississippi River Location	State	Lat. N	Long. W	Least Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
437	Vicksburg Harbor	MS			18		0
425.5	Letourneau Landing	MS			20		0
418.5	Newton Bend Dikes	LA	32.1367	91.0100	52	c*	8
413.5	Togo Island Dikes	LA			1		0
410	Yucatan Dikes	MS	32.07094	91.07669	150	c*	19
403	Coffee Point Dikes	LA			1		0
392.2	Bondurant Towhead Dikes	LA			225	c*	5
384.2	Spithead Towhead Dikes	MS	31.83712	91.34592	98	c*	19
378.5	Waterproof Dikes	LA	31.7604	91.3708	43		0
357	Carthage Point Dikes	MS	31.5163	91.49665	111		0
352	Opposite Warnicott Landing Dikes	MS	31.419	91.4927	53		0
346.5	Opposite Esperance Point Dikes	LA	31.3937	91.4675	27		0
329	Jackson Point	MS	31.2408	91.6484	46	*	0
322.0	Homochito Cutoff	LA	31.1742	91.5947	3		0
305.0	Shreves Bar Upper	LA	30.9960	91.6441	14		0
304	Shreves Bar Lower	LA	30.9916	91.6507	57	c*	5
300.5	Hog Point Dikes	LA	30.9358	91.64578	75		0
SUBTOTAL					994		

TOTAL INDIVIDUALS

12,183

TOTAL SITES

117

TOTAL COLONIES

59

c Confirmed chicks or eggs

* Nest colony determined by bird behavior (sitting inland, breasting, carrying fish, etc.)

Table 2: Summary of 2008 Least Tern Survey on the Lower Mississippi River

River Reach	Number of Terns (July 26-August 1, 2008)
Cape Girardeau, MO, to Cairo, IL URM 50 – RM 954	124
Cairo, IL, to Osceola, AR RM 954 – RM 790	2,807
Osceola, AR, to Helena, AR RM 790 – RM 670	3,300
Helena, AR, to Greenville, MS RM 670 – RM 530	3,419
Greenville, MS, to Vicksburg, MS RM 530 – RM 430	1,557
Vicksburg, MS, to Baton Rouge, LA RM 430 - RM 230	976
TOTAL	12,183

River Reach	Number of Colonies
Cape Girardeau, MO, to Cairo, IL URM 50 – RM 954	1
Cairo, IL, to Osceola, AR RM 954 – RM 790	14
Osceola, AR, to Helena, AR RM 790 – RM 670	16
Helena, AR, to Greenville, MS RM 670 – RM 530	15
Greenville, MS, to Vicksburg, MS RM 530 – RM 430	7
Vicksburg, MS, to Baton Rouge, LA RM 430 - RM 230	6
TOTAL	59

Table 3: Gage Readings – Lower Mississippi River
Least Tern Surveys – July, August 2008

*low stage prior to rise ^cresting stage
Shaded numbers indicate local stages at time of survey.

Date	Cairo	New Madrid	Caruthersville	Memphis	Helena	Arkansas City	Greenville	Vicksburg	Natchez
July 14	34.5	24.4	25.3	21.0	29.8	30.5	42.6	38.6	45.5
15	33.0	23.5	24.7	20.5	29.0	29.8	42.1	38.4	45.5
16	31.5	22.2	23.7	19.7	28.2	28.9	41.2	38.0	45.3
17	30.6	20.9	22.5	18.5	27.2	28.1	40.3	37.5	45.1
18	29.8	20.2	21.8	17.3	25.8	27.3	39.6	36.8	44.8
19	28.6	19.3	21.1	16.9	24.5	26.2	38.4	36.1	44.4
20	27.8	18.3	20.2	MSG	23.4	25.2	37.4	35.2	43.8
21	27.1	17.4	19.4	14.4	22.2	24.2	36.4	34.1	43.1
22	26.2	17.0	19.0	13.5	21.1	22.8	35.0	33.0	42.3
23	24.1 *	15.6	18.1	12.9	20.2	21.7	33.7	31.5	41.2
24	24.5	14.6 *	16.9 *	11.8	19.3	20.8	32.6	30.2	40.0
25	25.0	15.0	16.9 *	10.6	18.0	20.0	31.7	28.7	38.8
26	25.0	15.3	17.2	10.3 *	17.0	19.2	30.8	27.5	37.4
27	25.1	15.3	17.3	10.4	16.8 *	18.3	29.9	26.3	36.1
28	25.4	15.5	17.4	10.6	16.8 *	17.6	29.1	25.1	34.6
29	26.3	16.1	17.8	10.7	16.9	17.2	28.6	24.1	33.2
30	27.3	17.0	18.5	11.1	17.1	16.8	28.1	23.1	32.1
31	28.6	18.2	19.5	11.9	17.5	16.7 *	27.8 *	22.5	31.2
August 1	29.8	19.3	20.4	13.1	18.6	17.0	28.0	22.2 *	30.5
2	30.3	20.0	21.2	14.1	19.8	17.6	28.5	22.3	30.2 *
3	30.6	20.4	21.6	15.1	20.9	18.4	29.3	22.8	30.2 *
4	30.7	20.6	21.8	15.6	21.8	19.0	29.9	23.4	30.6
5	30.8 ^	20.7 ^	22.0 ^	15.8	22.4	19.7	30.7	24.1	31.1
6	30.2	20.5	21.9	16.1 ^	22.7	20.3	31.3	24.8	31.7
7	28.6	19.5	21.3	16.0	22.9 ^	20.4	31.6	25.5	32.3
8	26.9	17.8	20.1	15.5	22.8	20.7	MSG	26.0	33.4
9	24.4	16.0	18.6	14.1	21.9	20.8 ^	32.0 ^	26.3	34.4
10	22.5	13.9	16.8	12.5	20.5	20.4	31.8	26.5 ^	33.6
11	20.8	12.1	15.1	10.5	18.7	19.6	31.2	26.4	33.9
12	20.5	10.8	13.8	8.7	16.7	18.6	30.3	26.1	34.1
13	19.7	10.3	13.1	7.1	15.1	17.4	28.9	25.8	34.3 ^
14	17.9	8.9	12.4	6.0	13.6	16.4	27.8	24.8	33.6
15	17.4	7.6	11.0	5.1	12.4	15.5	26.9	23.5	32.4
16	16.3	6.8	10.2	3.9	11.5	14.9	26.1	22.3	31.3

17	14.2	3.8	6.3	-1.3	5.8	15.9	27.7	23.8	33.4
18	13.8	3.5	6.1	-1.6	5.0	15.3	27.2	23.4	33.0
19	13.6	9.5	11.5	-2.2	3.3	14.5	26.5	22.9	32.6

Table 4: Summary of Least Tern Surveys – 1985 – 2008
Lower Mississippi River

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Aerial											
Individuals	187	1,332	1,125	1,018	2,503	4,182	3,358	2,311	4,589	3,303	3,759
Sites	12	37	49	56	58	56	67	80	66	66	63
Colonies	3	16	24	31	46	36	56	61	46	40	51
Towboat											
Individuals	577	595	575	1,235	508	357	1,154	1,216	2,031	965	489
Sites	35	39	45	71	25	31	39	47	48	39	25
Colonies	15	16	21	33	9	3	29	34	21	30	1
Small Boat											
Individuals	0	2,188	2,206	2,356	2,005	5,038	4,297	3,653	0	6,776	6,971
Sites	0	41	50	72	64	38	66	81	0	78	70
Colonies	0	28	46	60	42	32	57	74	0	69	62
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Aerial											
Individuals	3,677	2,129	0	0	0	0	0	0	0	0	0
Sites	81	81	0	0	0	0	0	0	0	0	0
Colonies	20	23	0	0	0	0	0	0	0	0	0
Small Boat											
Individuals	3,067	3,428	5,538	6,159	5,920	6,361	5,802	8,082	11,239	10,960	8,171
Sites	47	79	91	134	124	141	100	115	114	118	144
Colonies	31	57	39	38	64	54	68	68	69	88	107
Year	2007	2008									
Small Boat											
Individuals	9,814	12,183									
Sites	121	113									
Colonies	96	59									

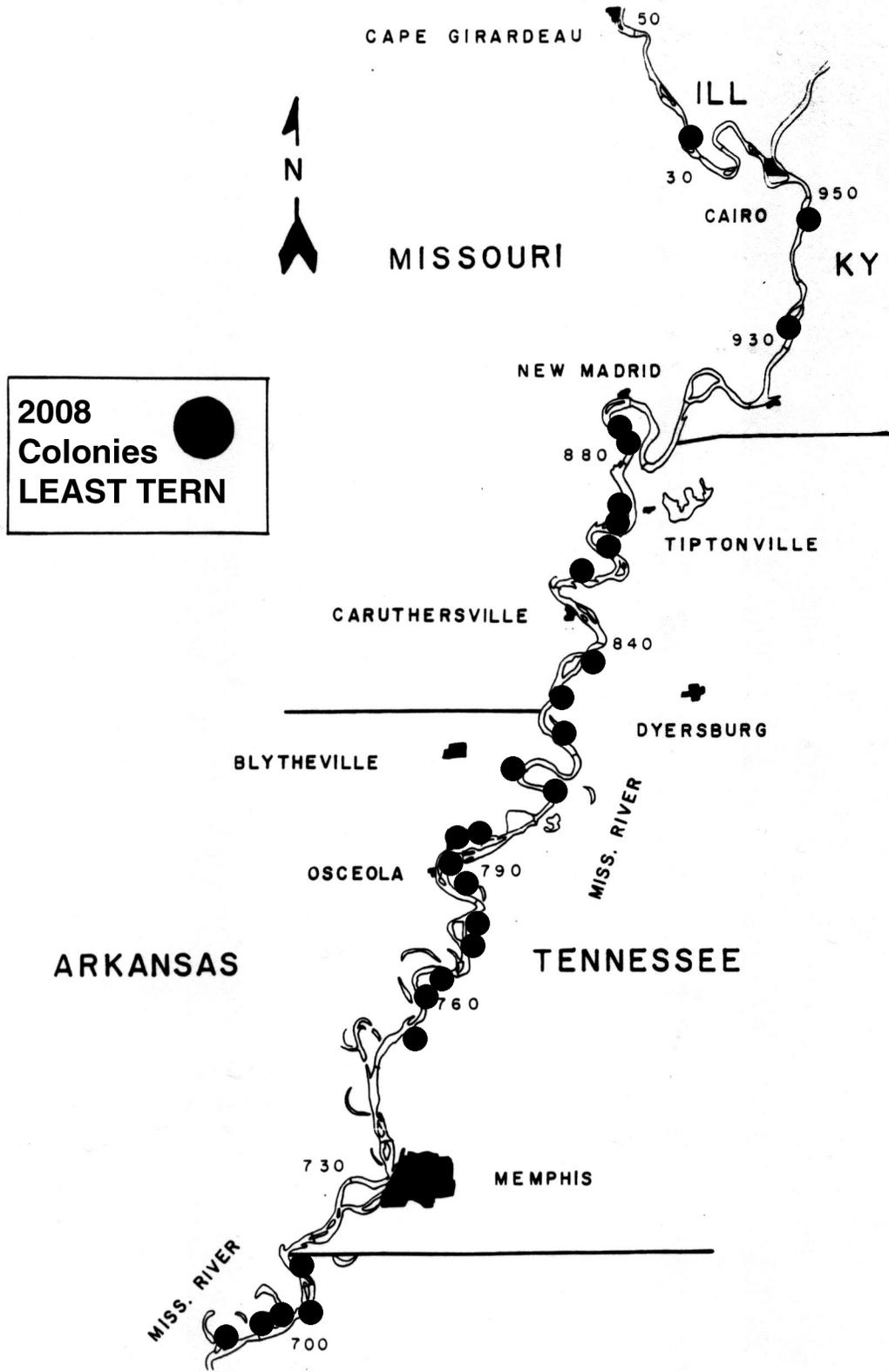


Fig 1.: Least Tern Survey – 2008 – Area Map of Nest Colonies on Mississippi River – Cape Girardeau, MO to Baton Rouge, LA

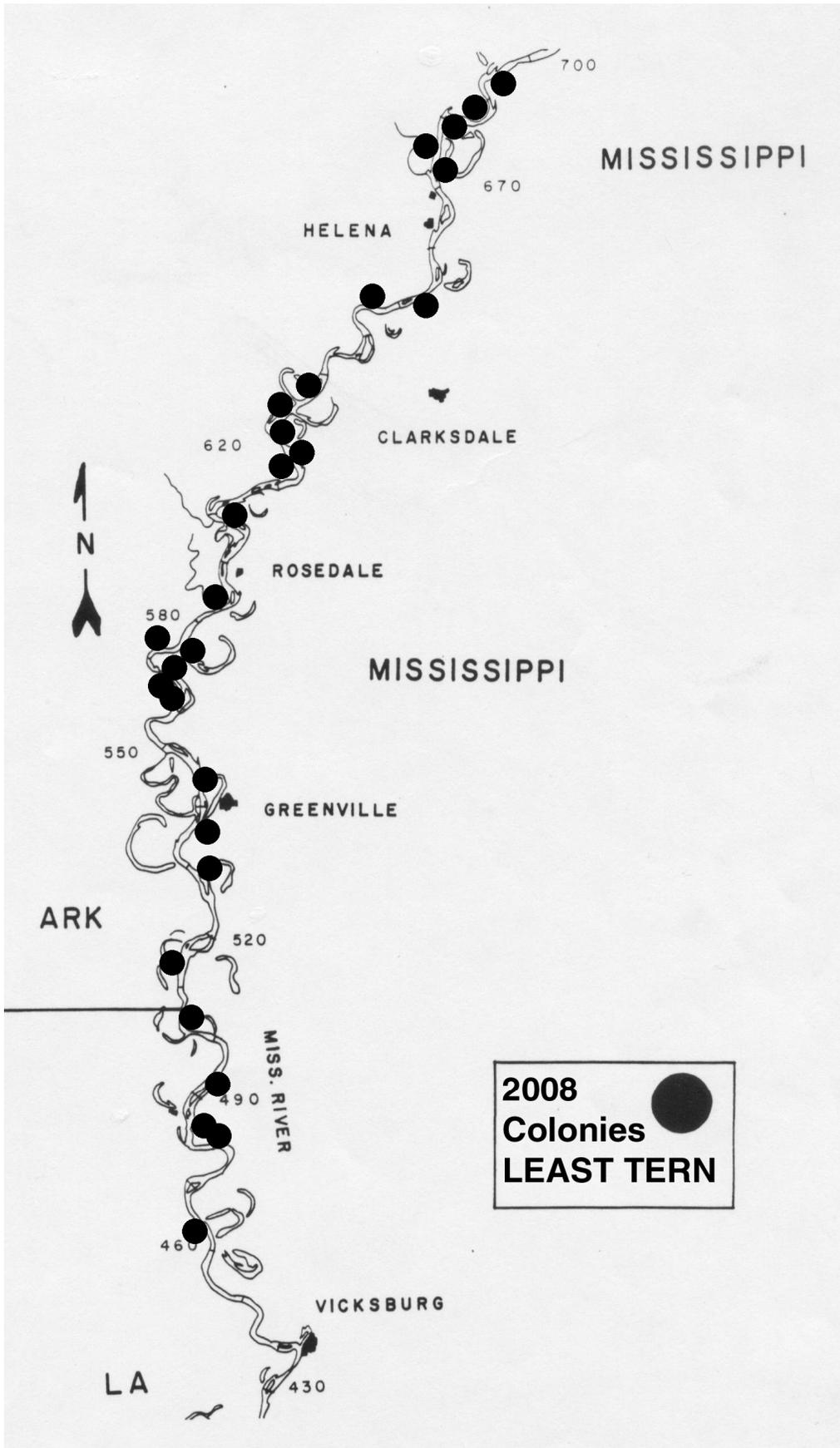


Fig 1. Continued: Area Map of Nest Colonies

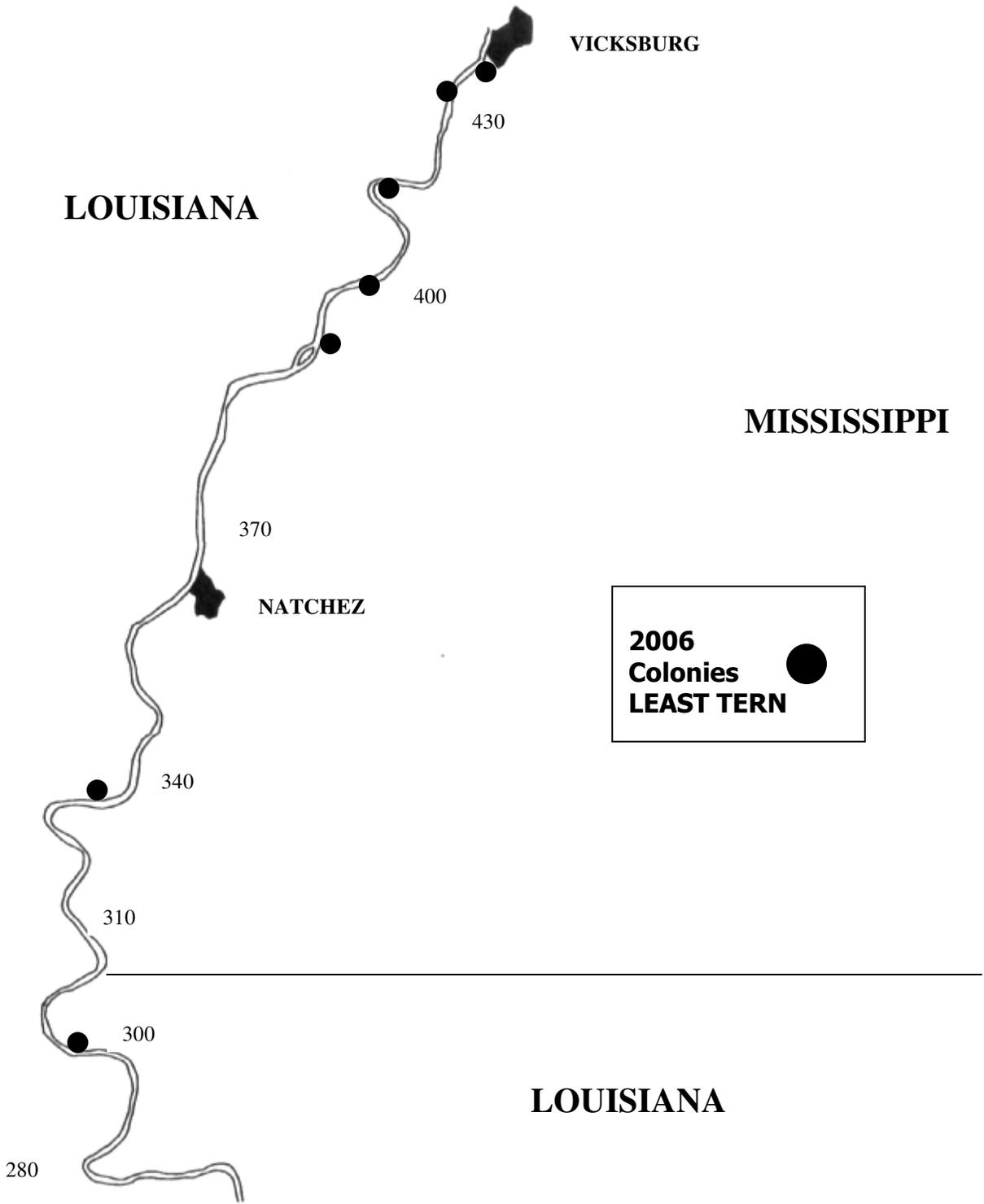
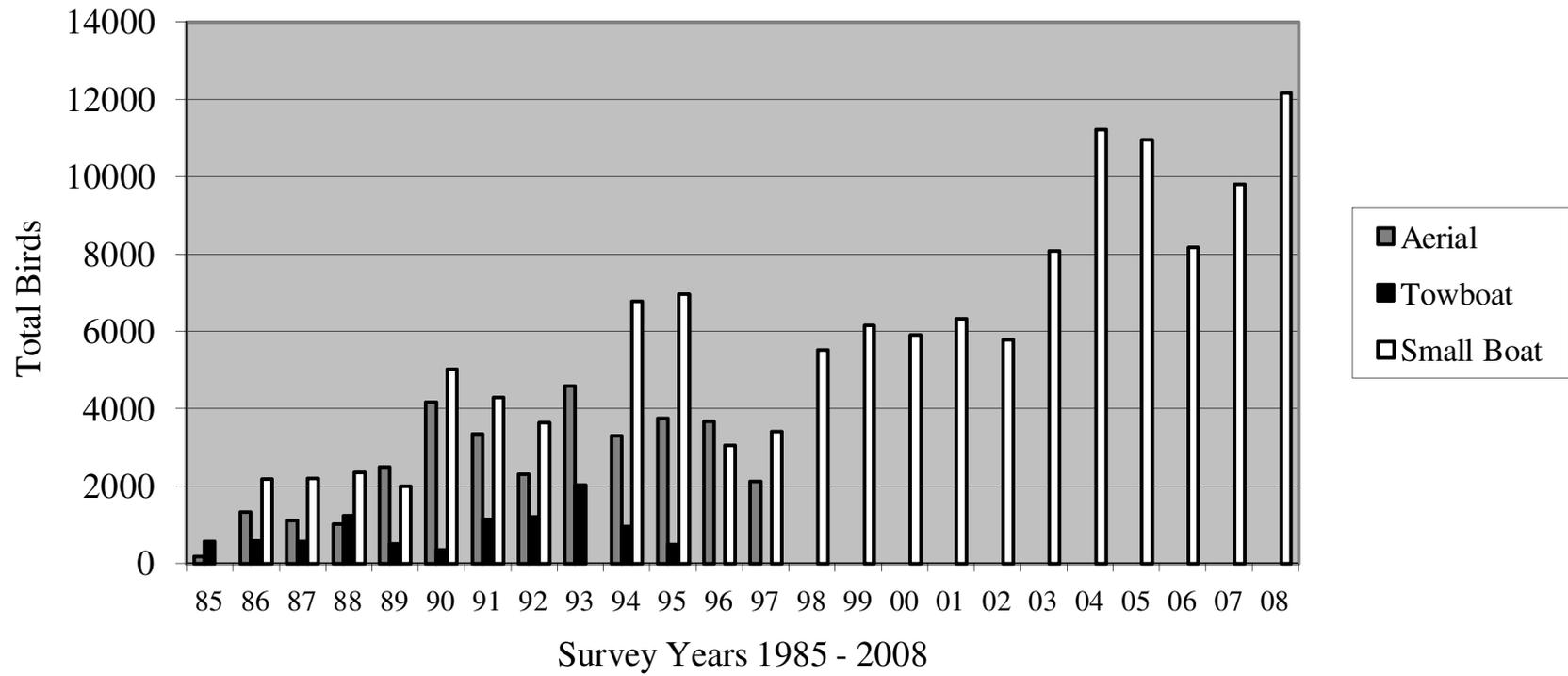


Figure 1 Continued: Area Map of Nest Colonies

Least Tern Surveys
Lower Mississippi River



**Population Survey of the Interior Least Tern
On the Mississippi River from
Cape Girardeau, Missouri to Baton Rouge, Louisiana**

2008

APPENDIX A

APPENDIX A – I

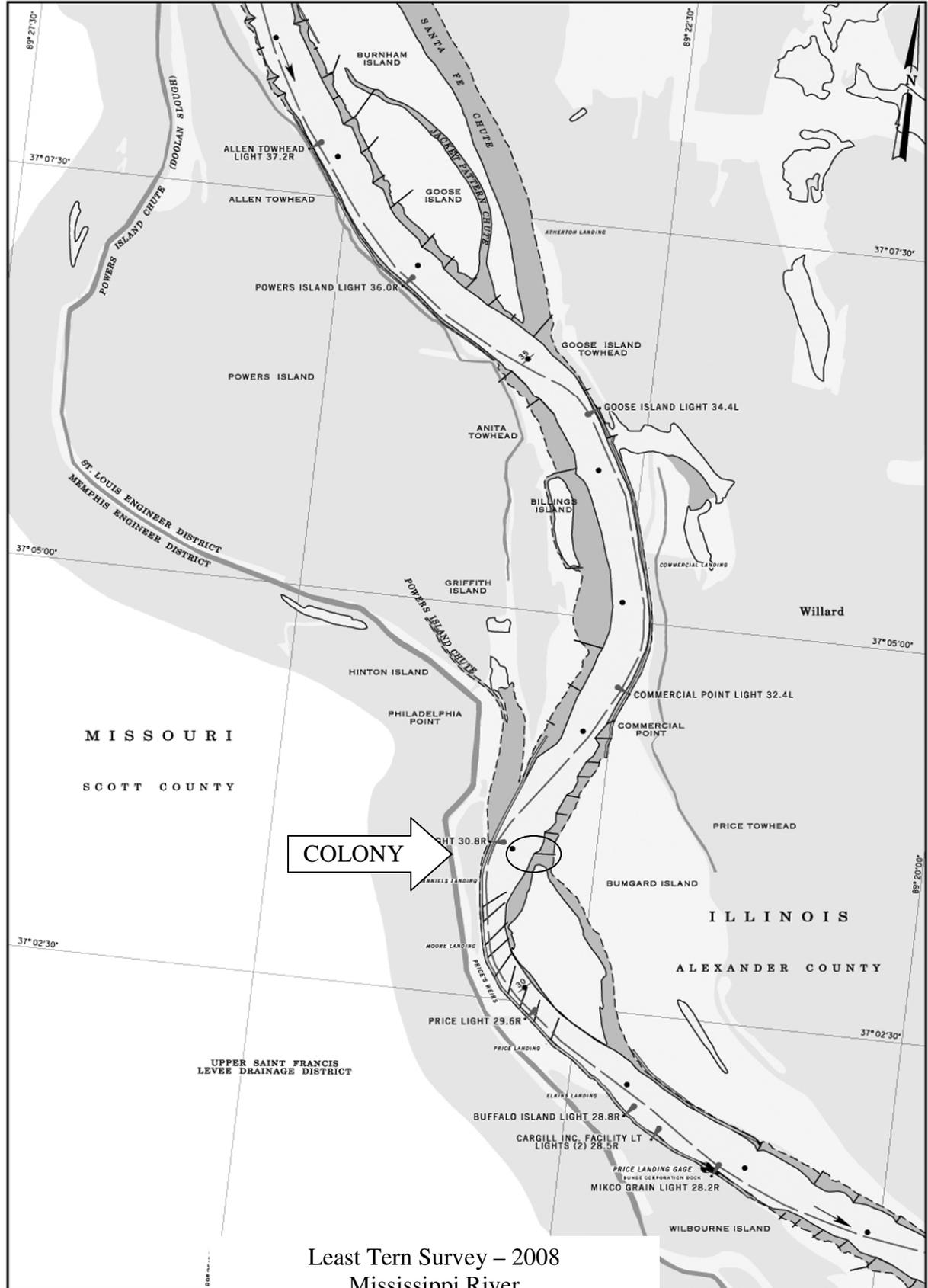
LEAST TERN SURVEY - 2008

**Mississippi River
Cape Girardeau, MO to Baton Rouge, LA**

NEST COLONY LOCATIONS

Memphis District, Corps of Engineers

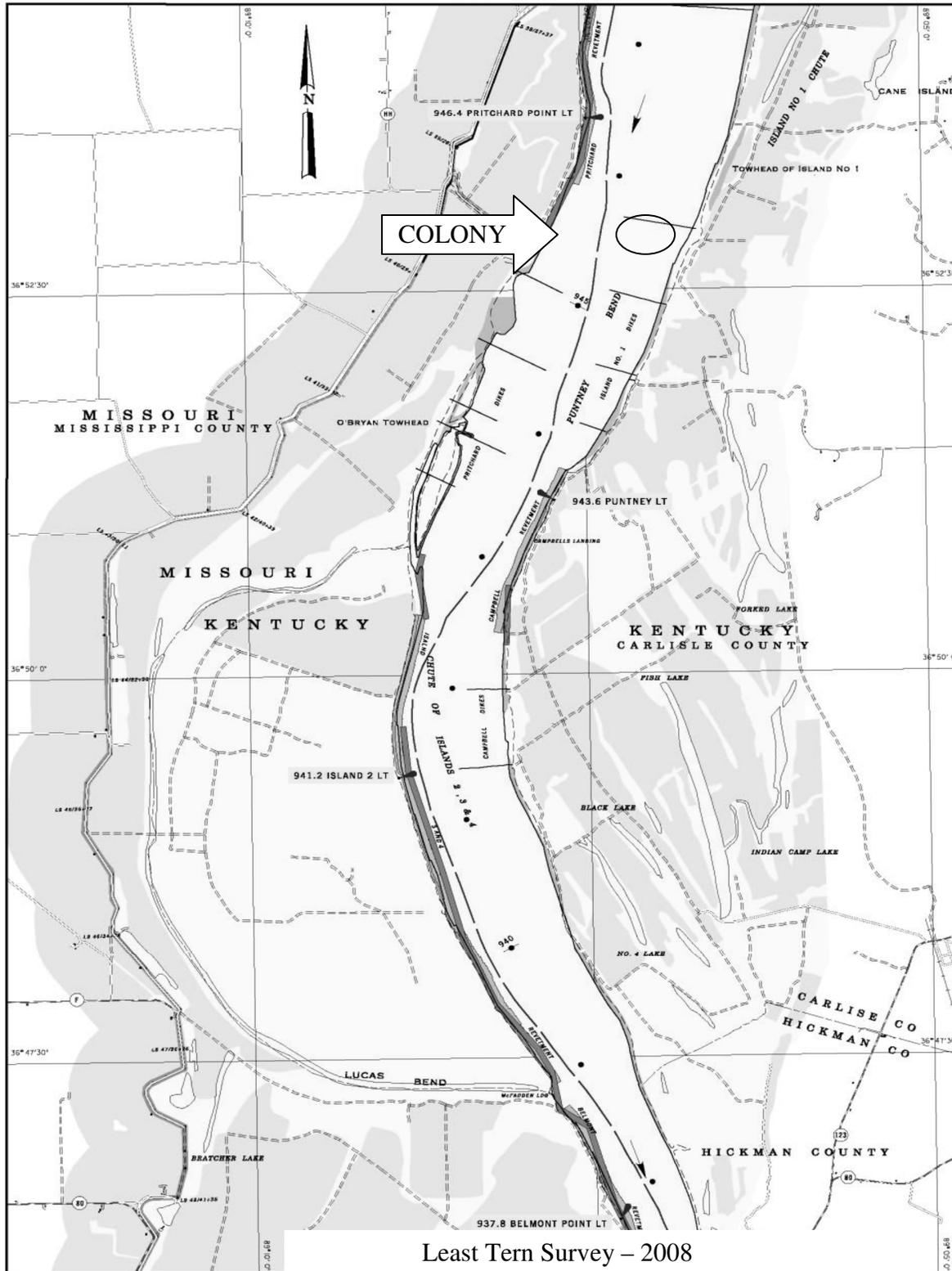
Maps



1998

MAP NO. 27

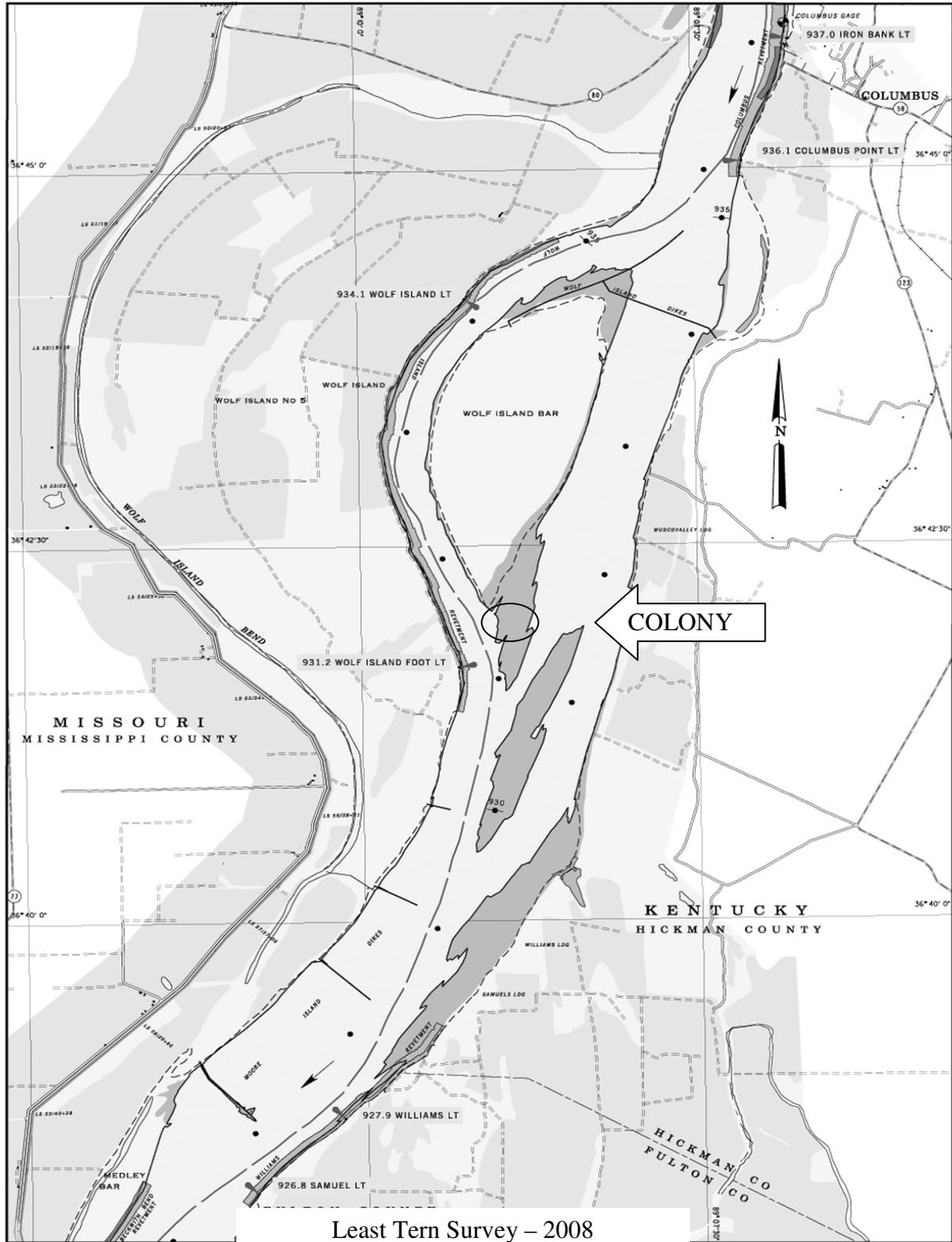
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-1



1998

AP NO. 31

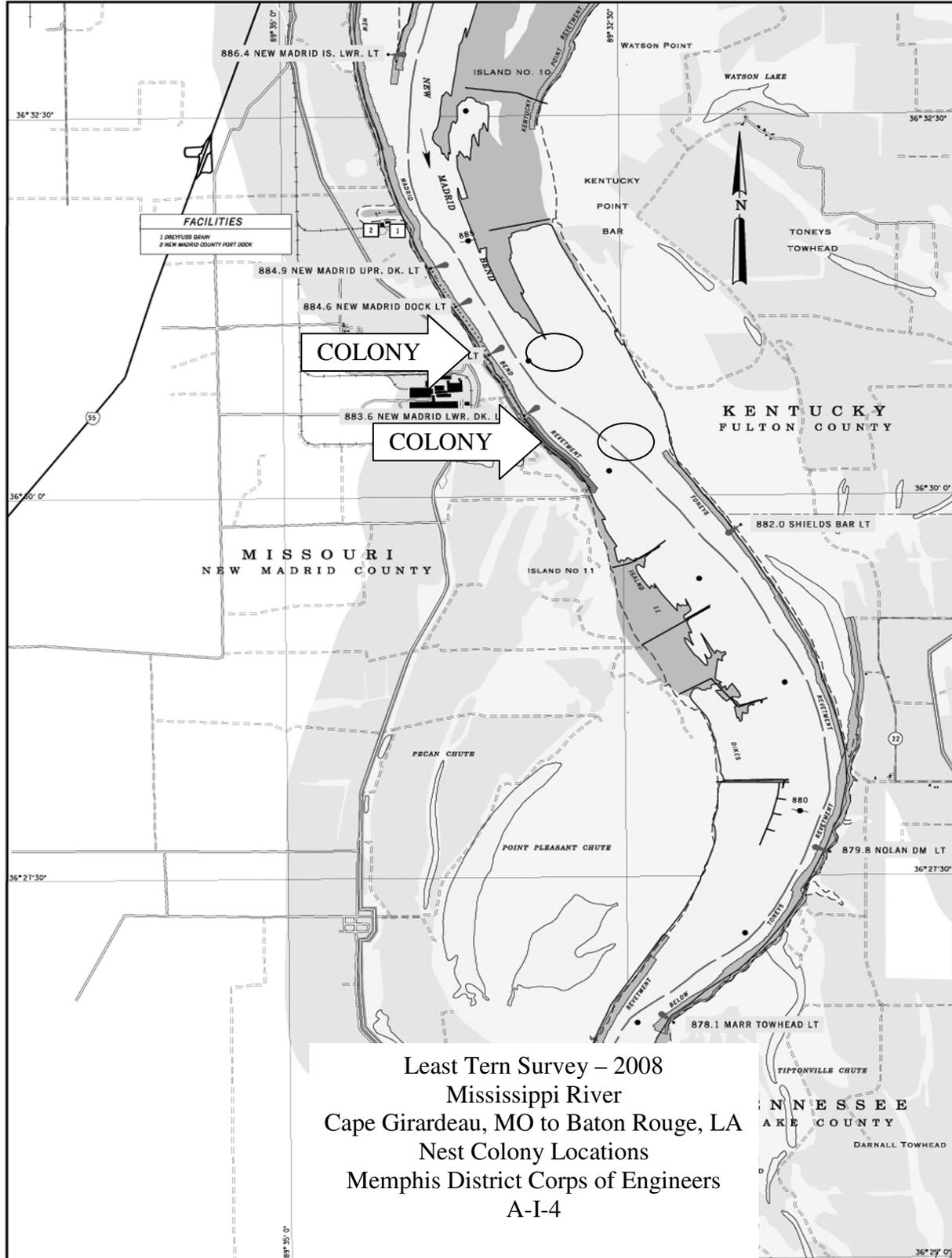
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-2



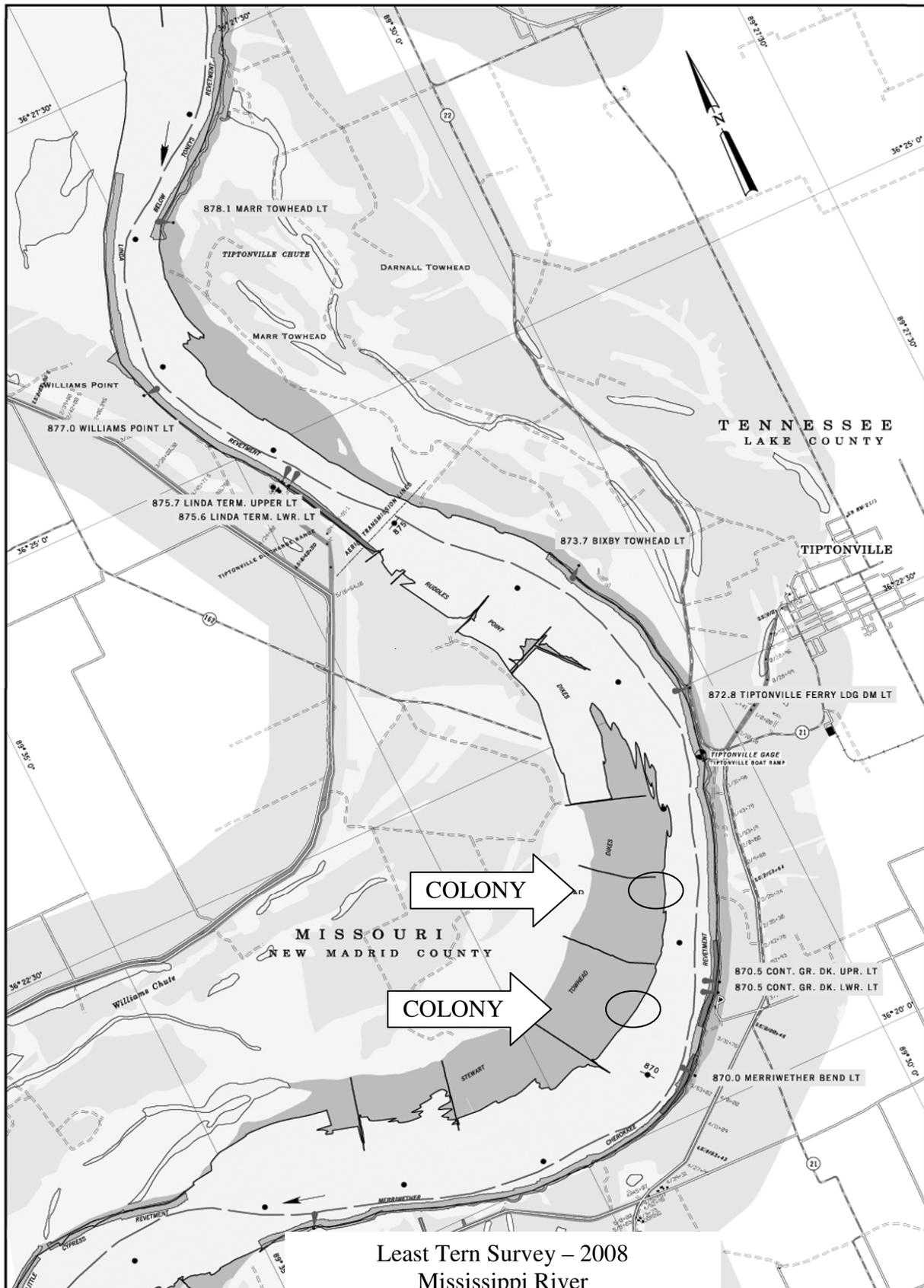
1998

MAP NO. 32

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-3



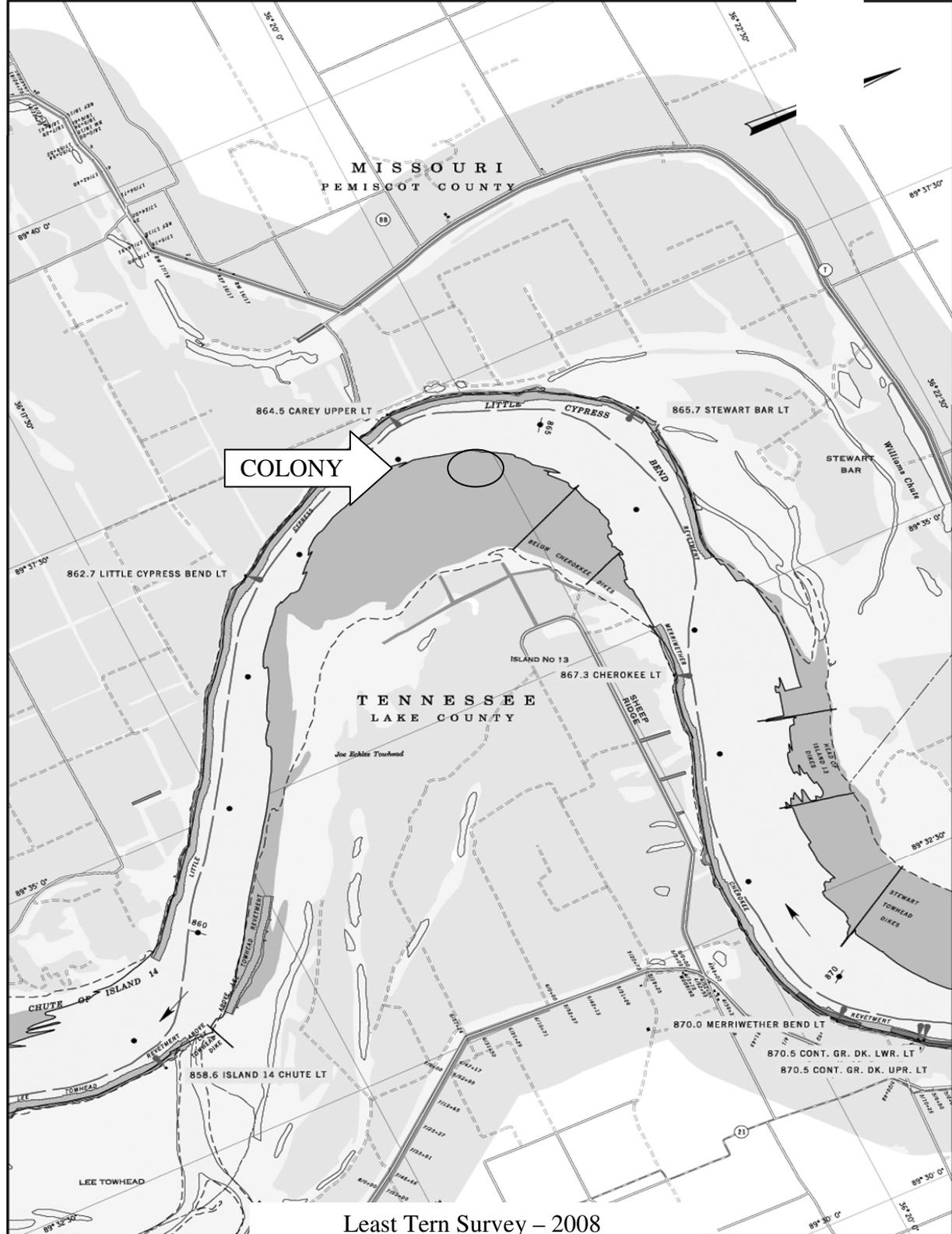
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-4



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-5

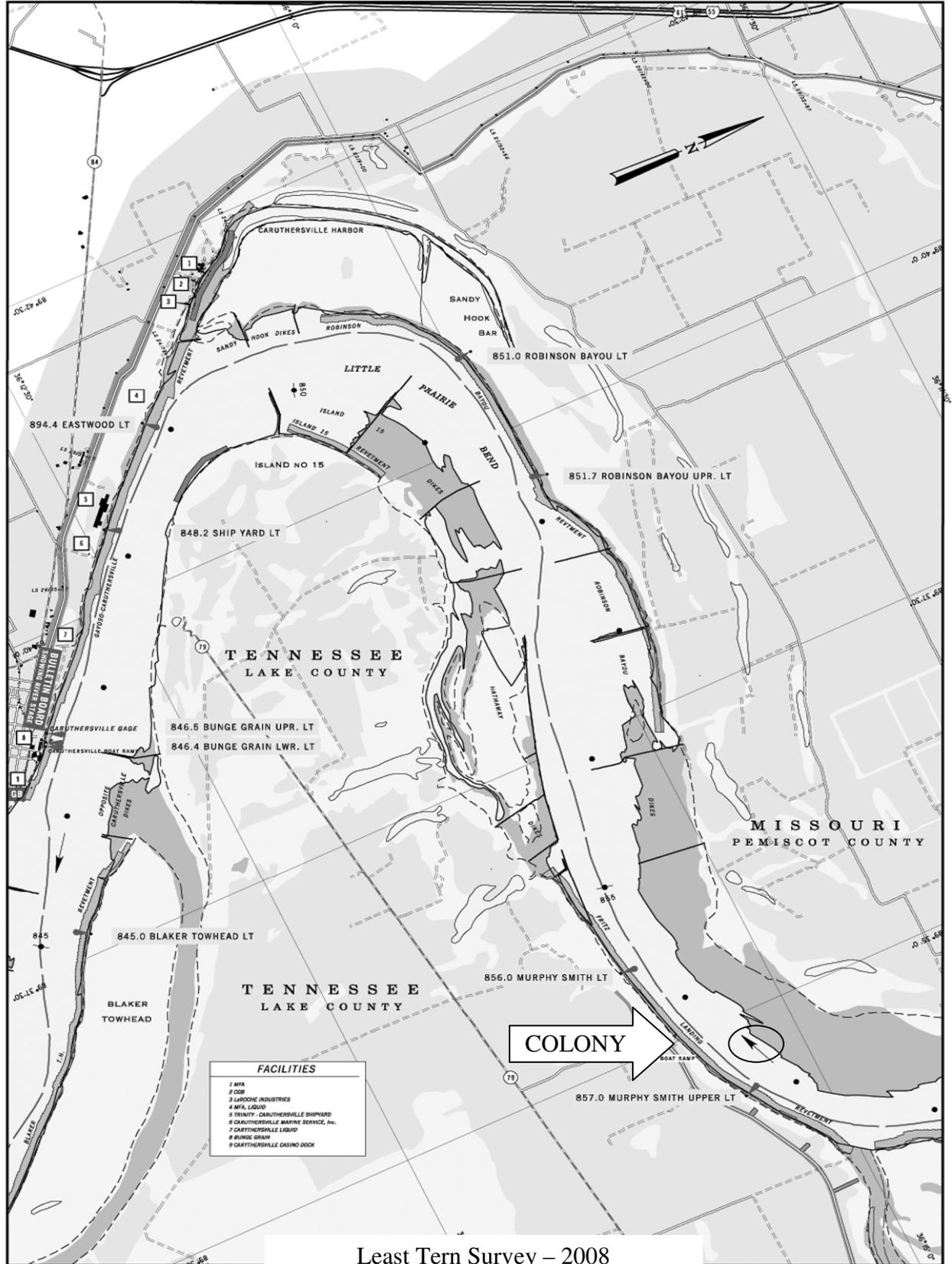
MAP NO. 38



1998

MAP NO. 39

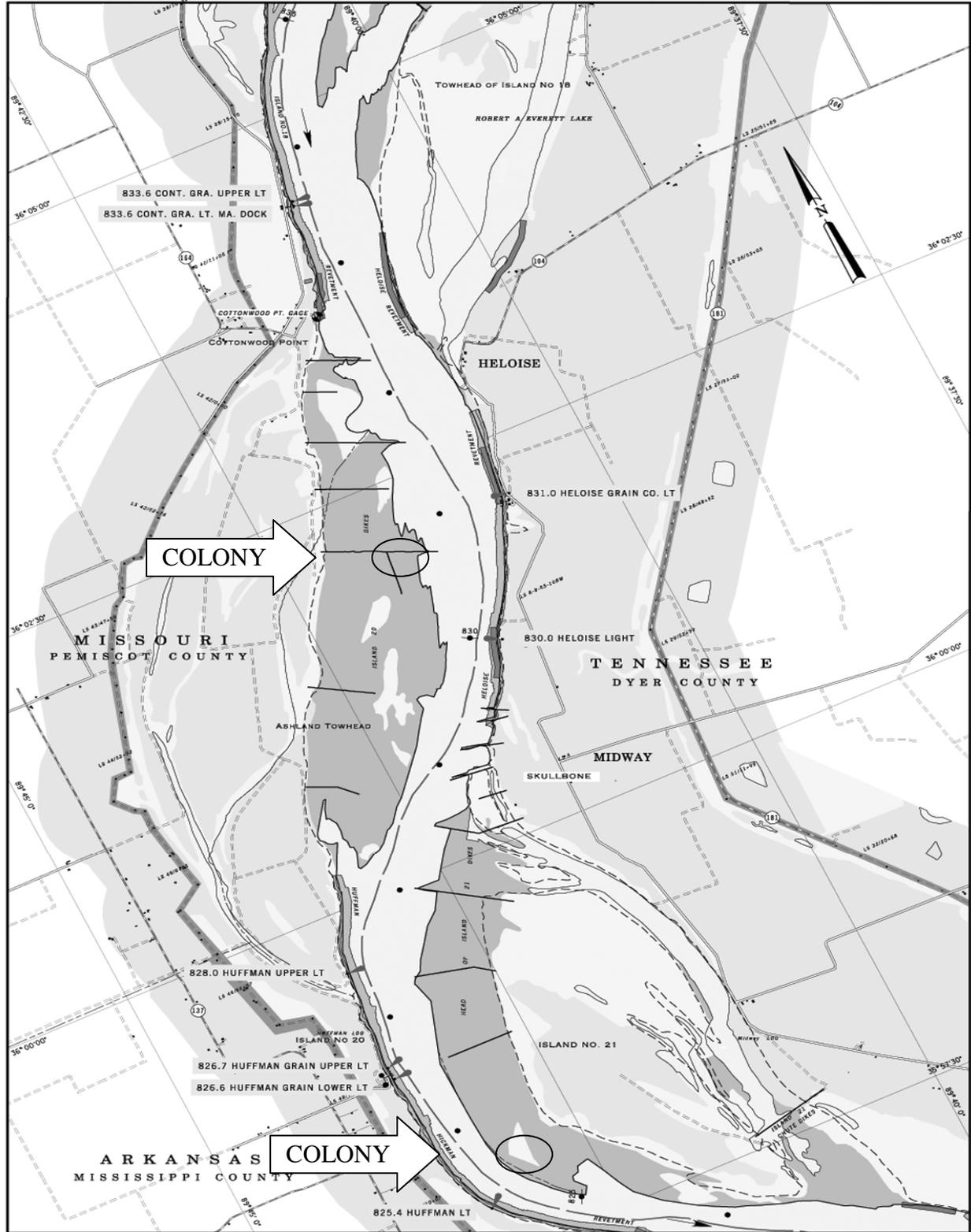
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-6



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-7

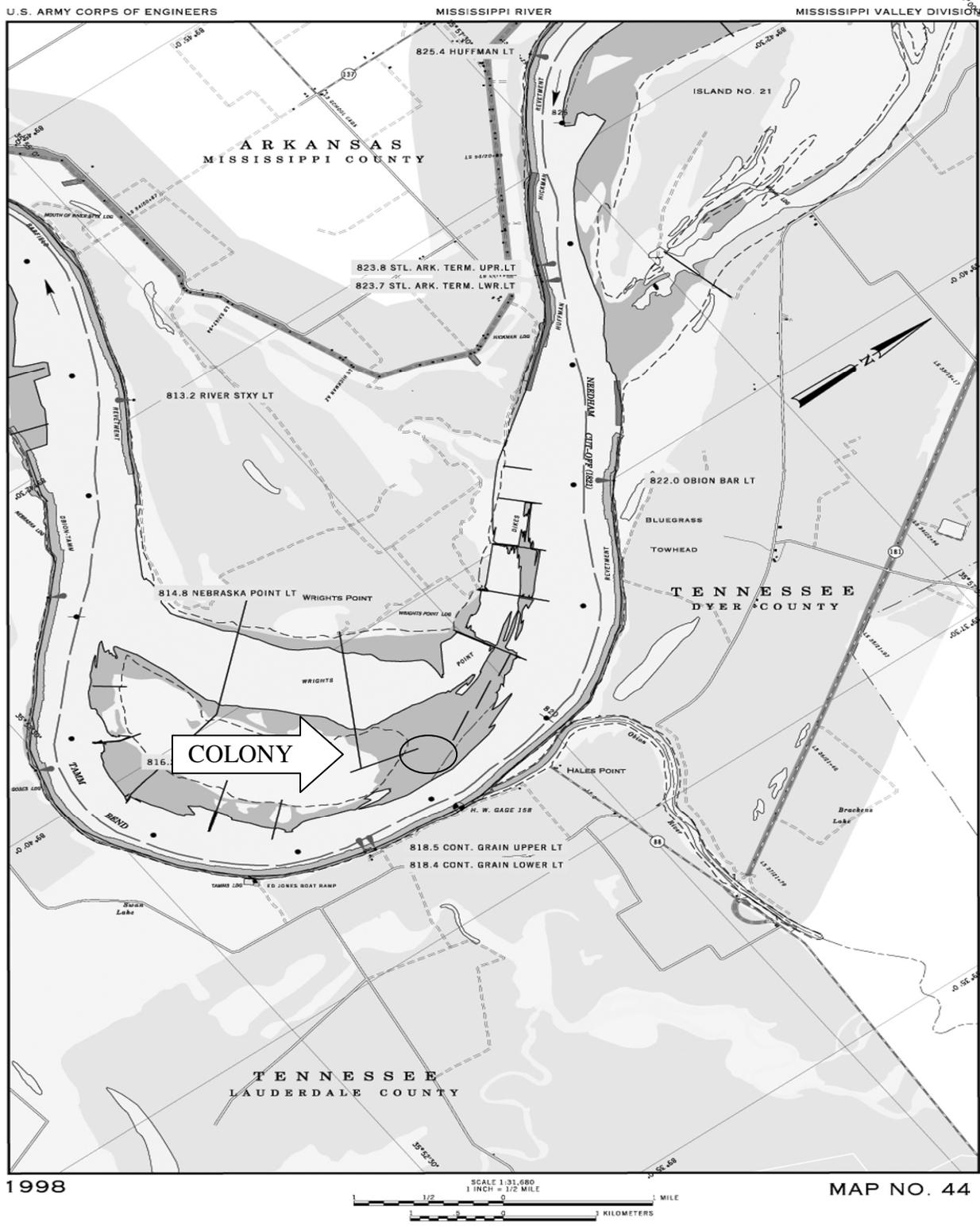
MAP NO. 40



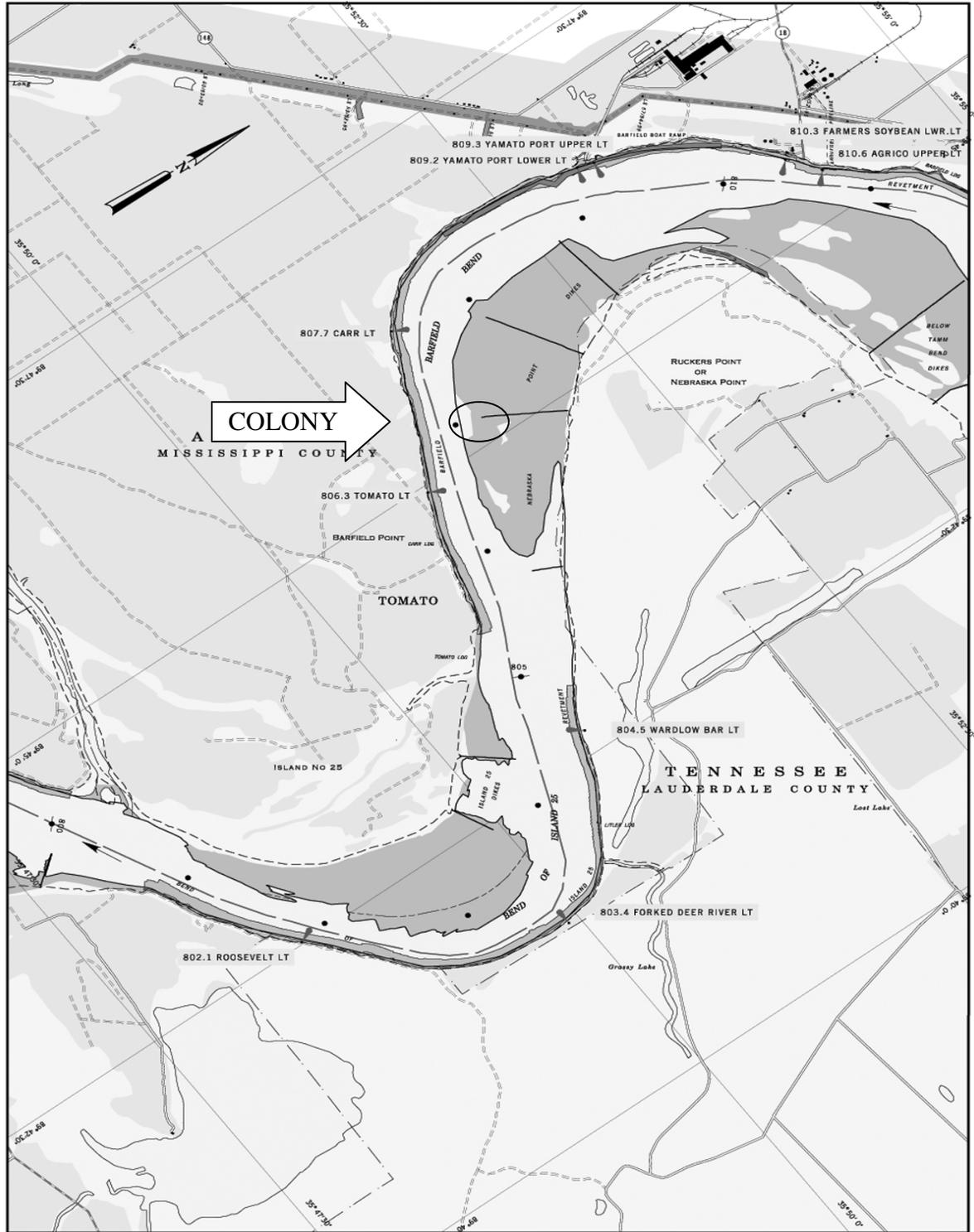
1998

MAP NO. 43

Least Tern Survey – 2008
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-9



Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-10

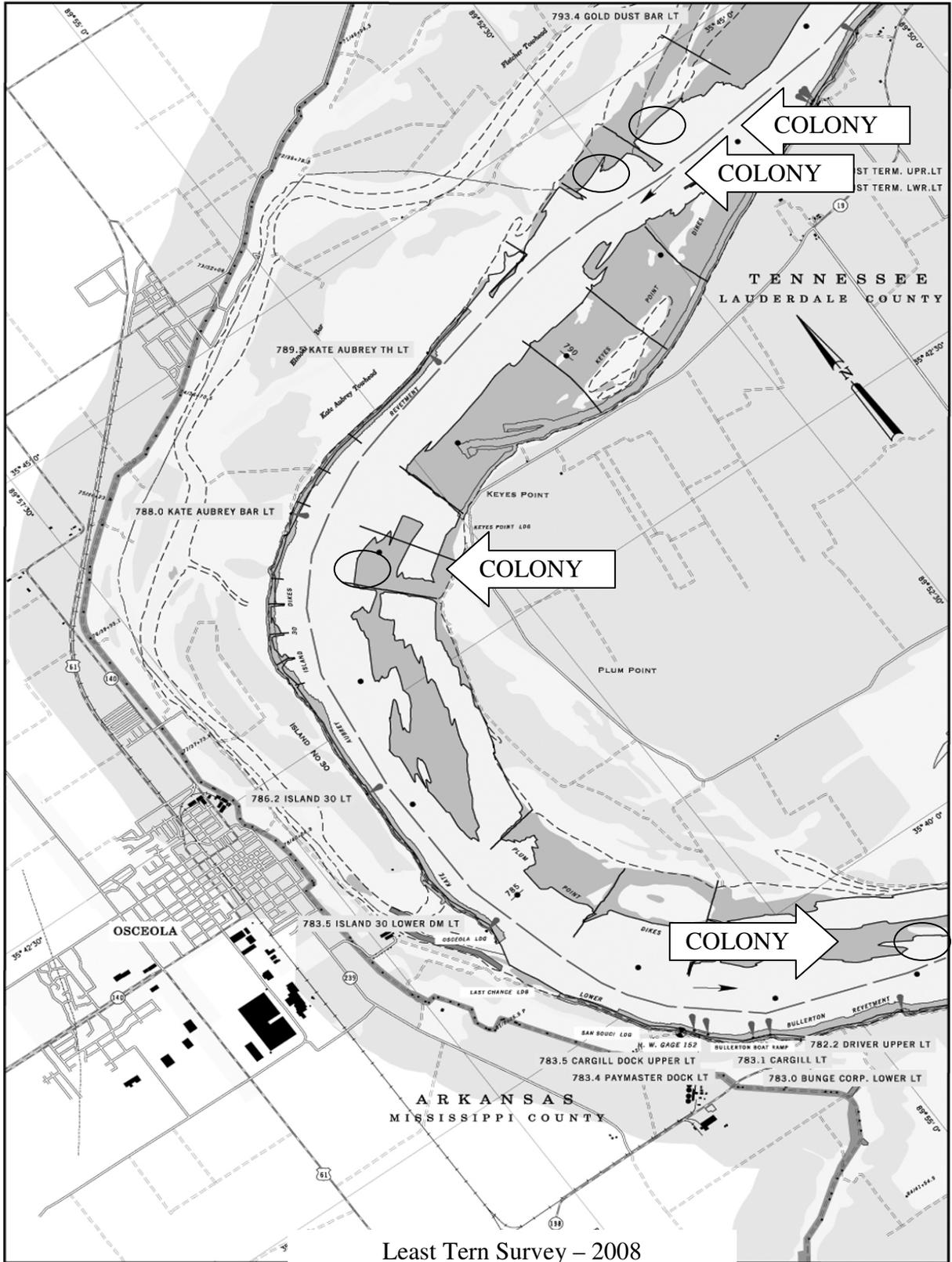


1998

SCALE 1:31,680

MAP NO. 45

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-11



1998

Least Tern Survey - 2008

Mississippi River

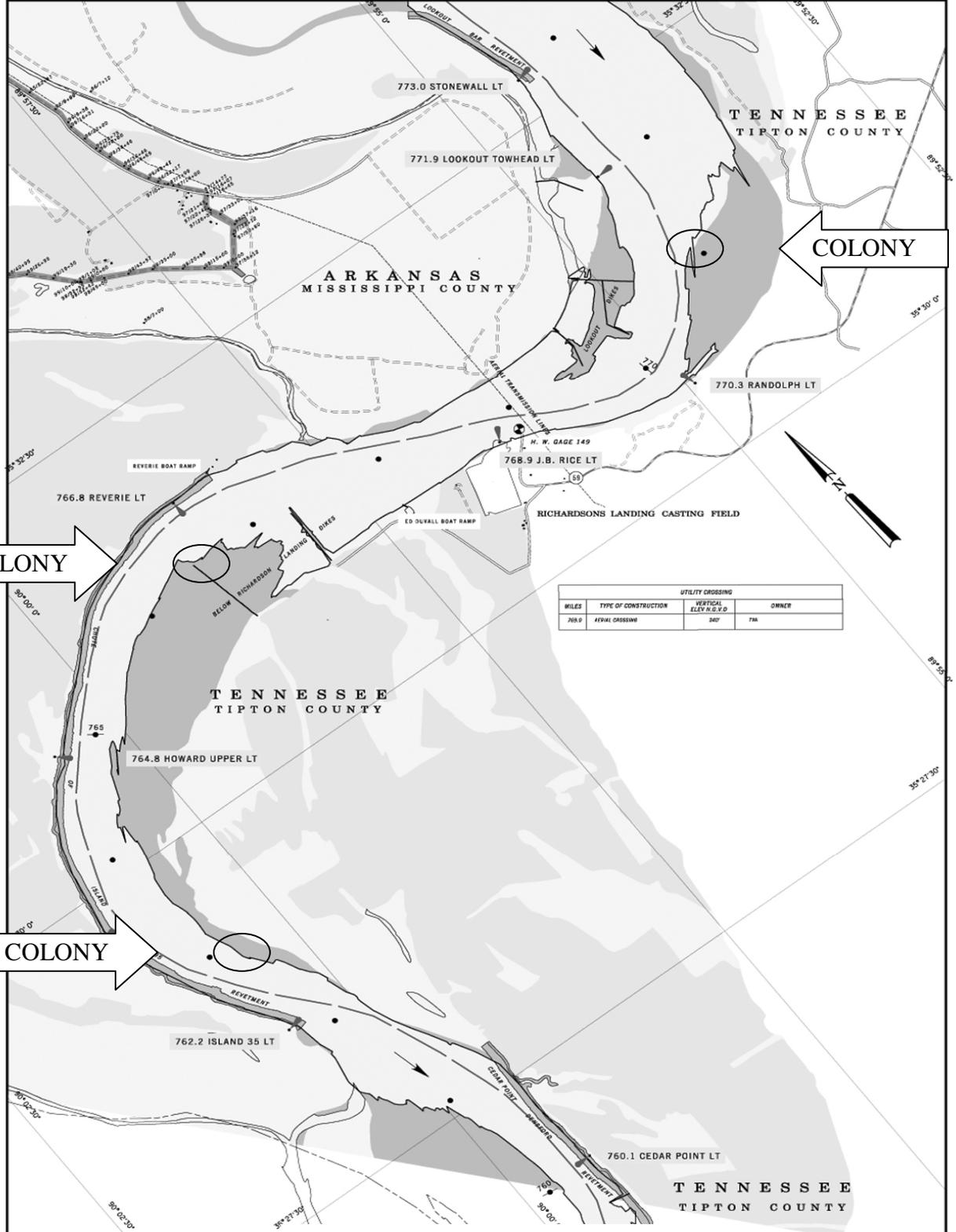
Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

A-I-12

MAP NO. 48



1998

Least Tern Survey – 2008

MAP NO. 51

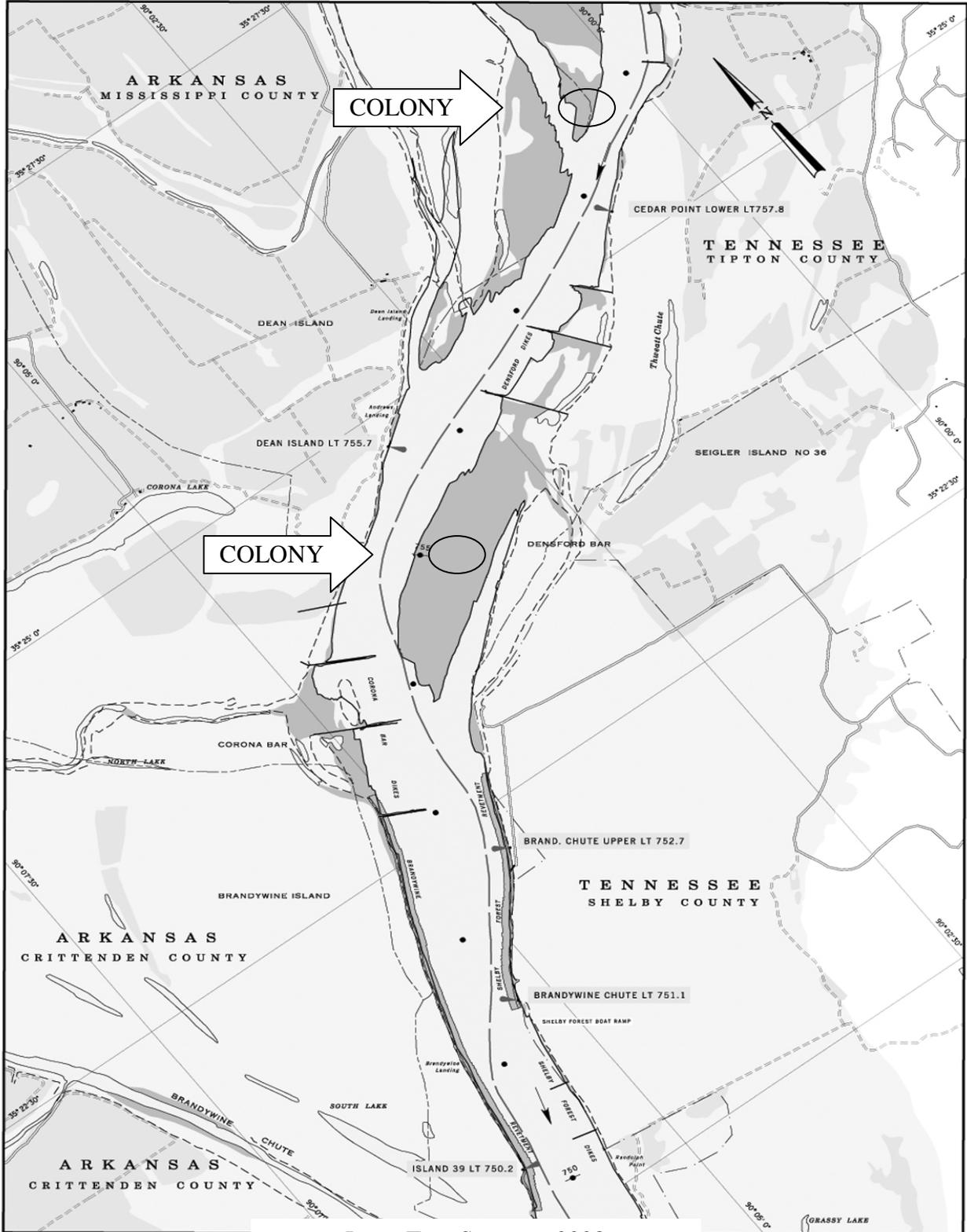
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

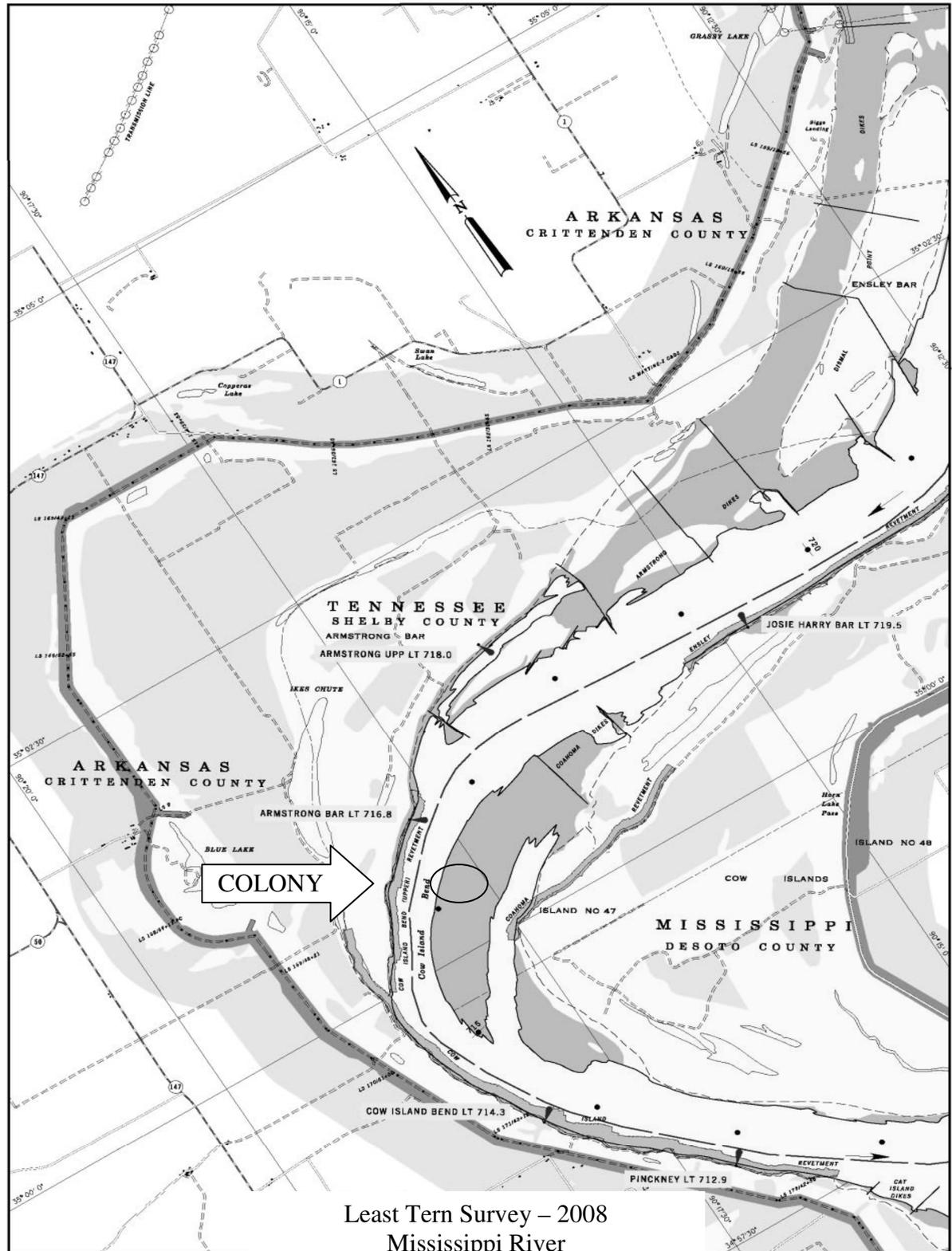
A-I-13



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-14

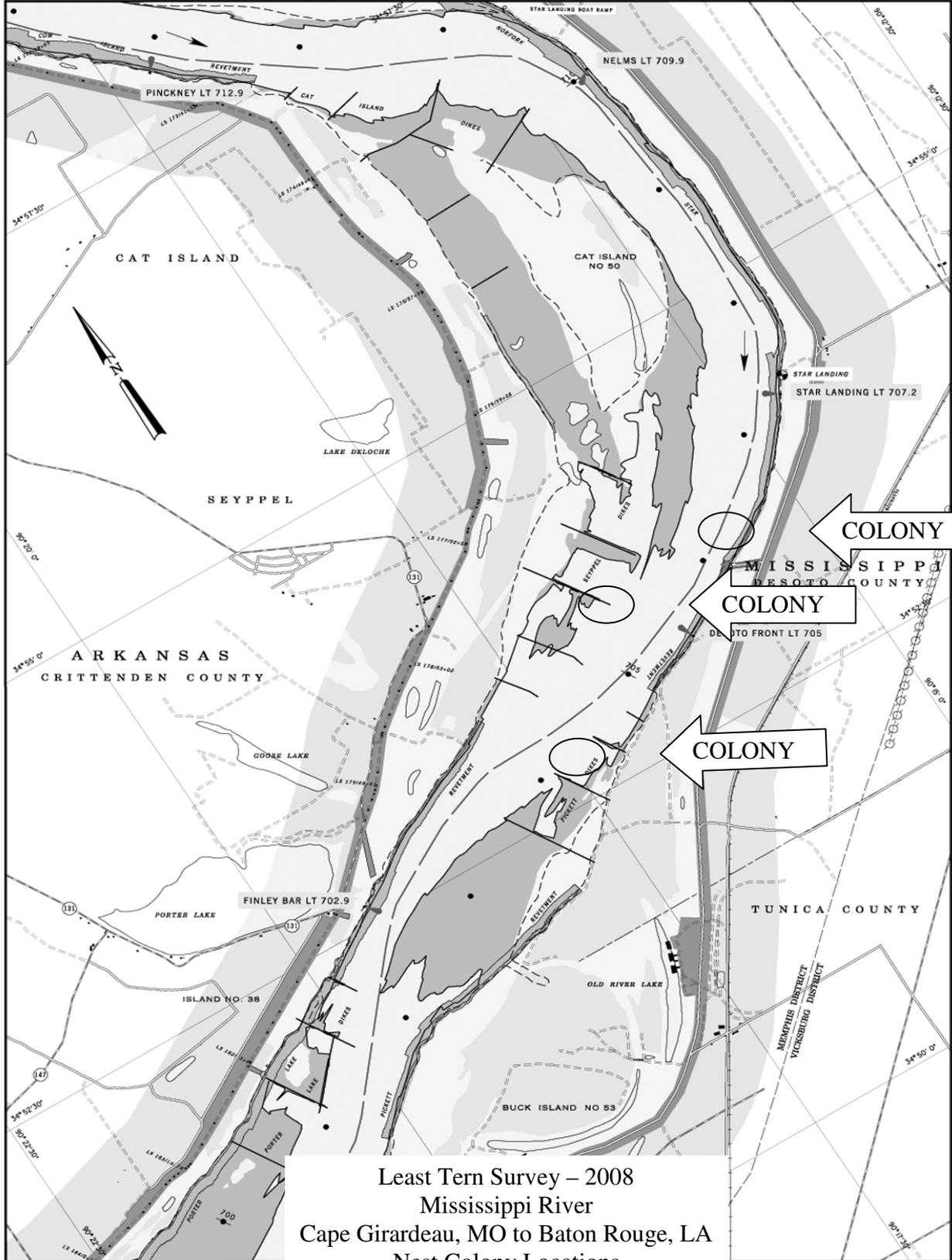
MAP NO. 53



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-15

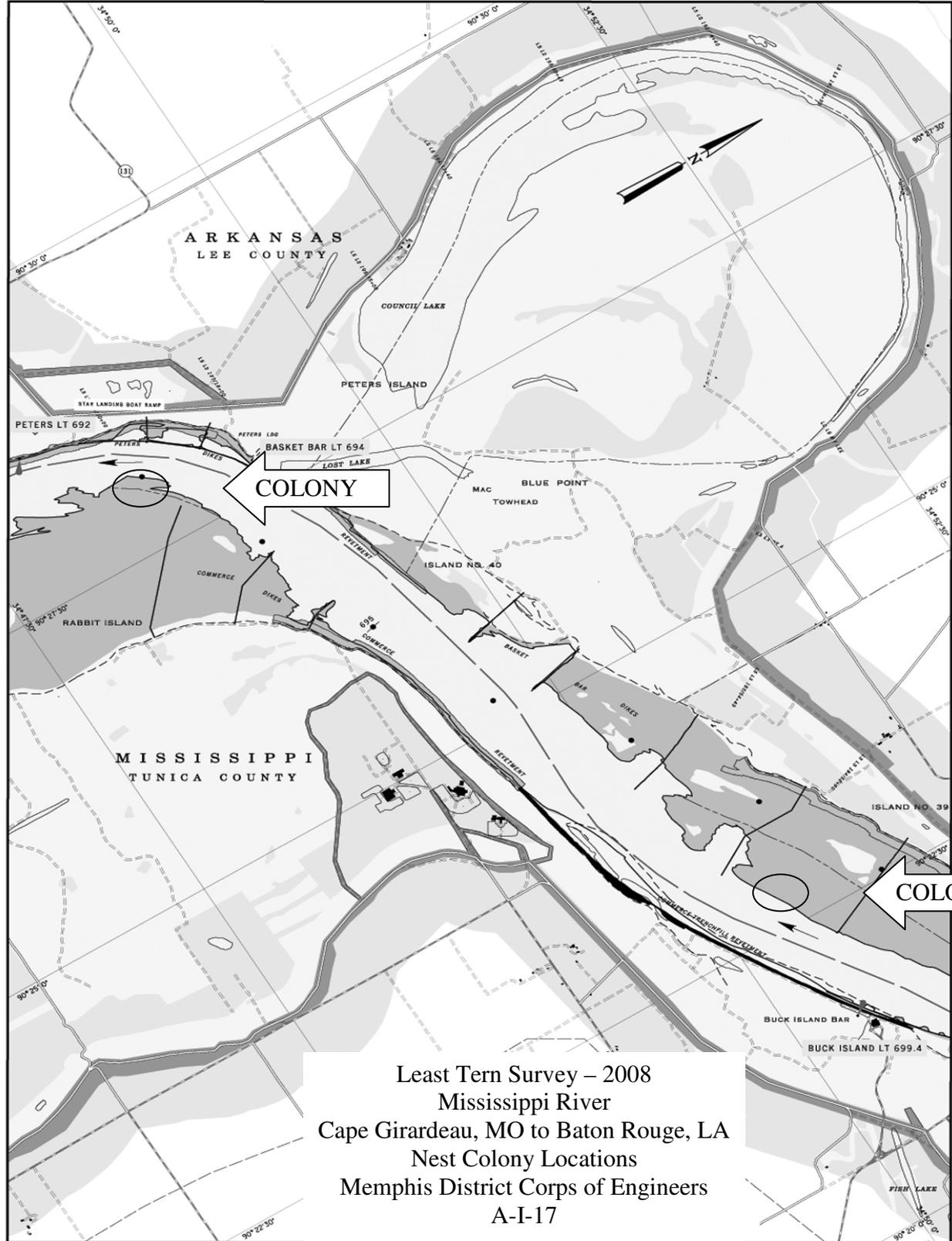
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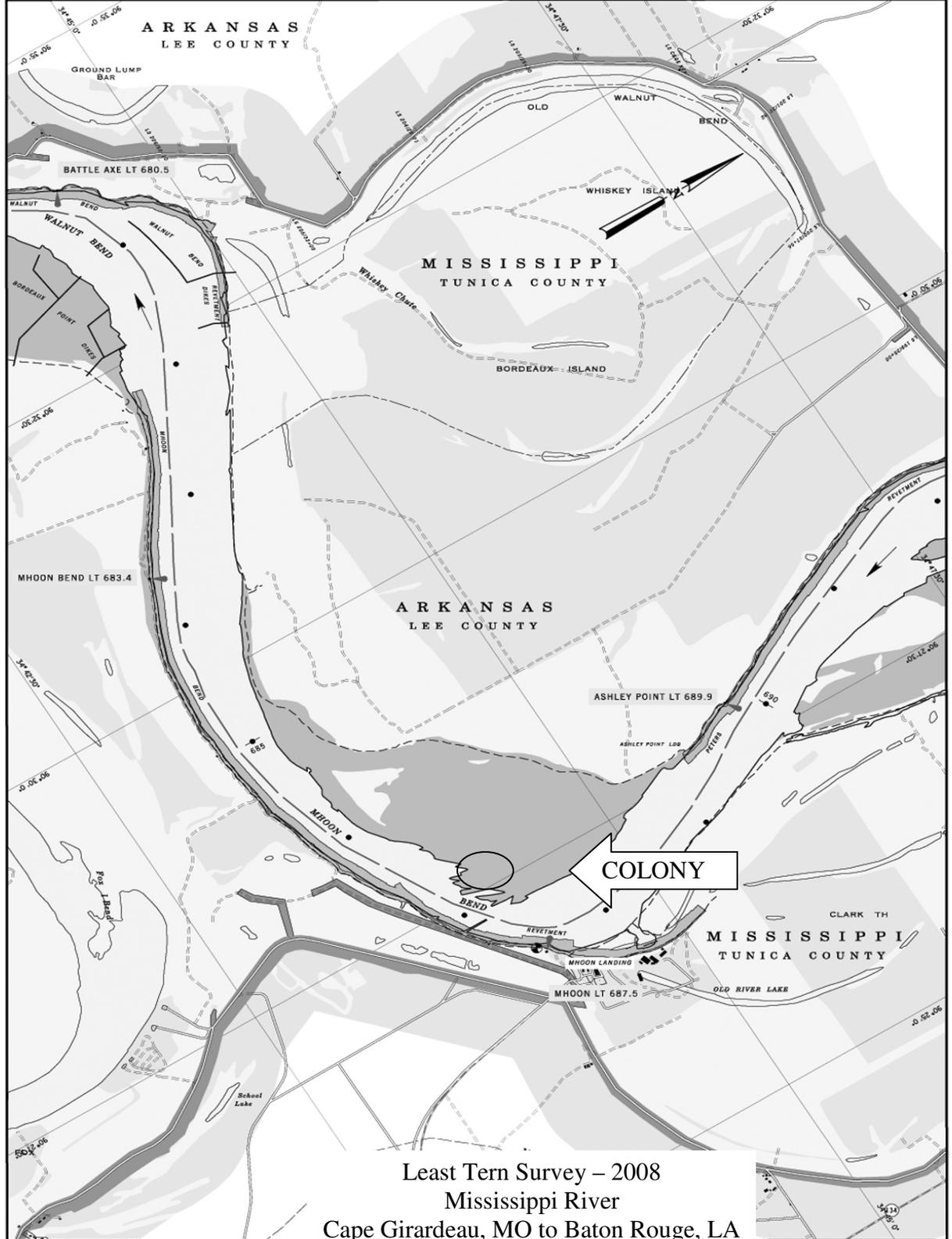
1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-16

MAP NO. 61



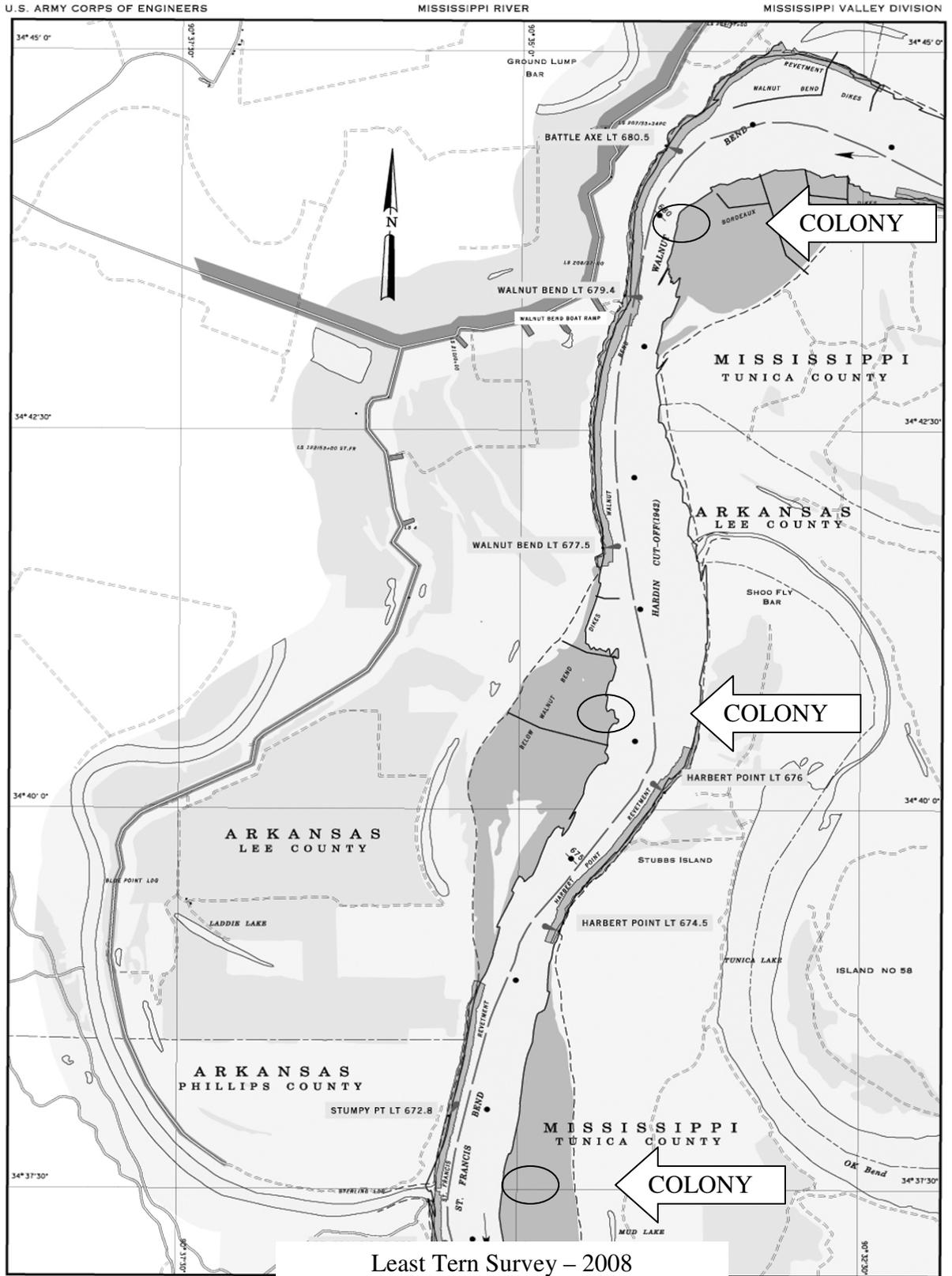
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-17



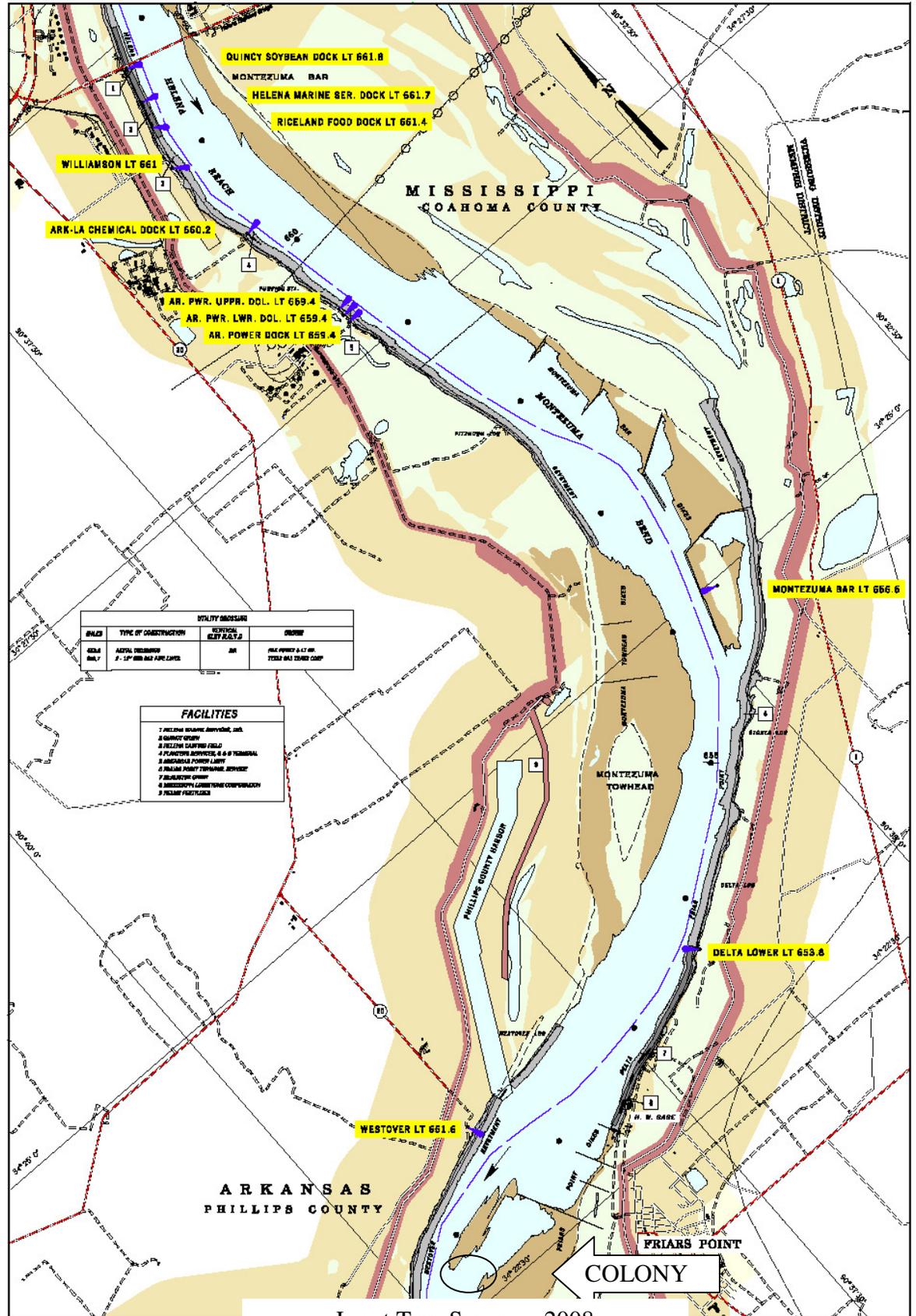
1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-18

MAP NO. 63



Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-19



1998

Least Tern Survey – 2008

Mississippi River

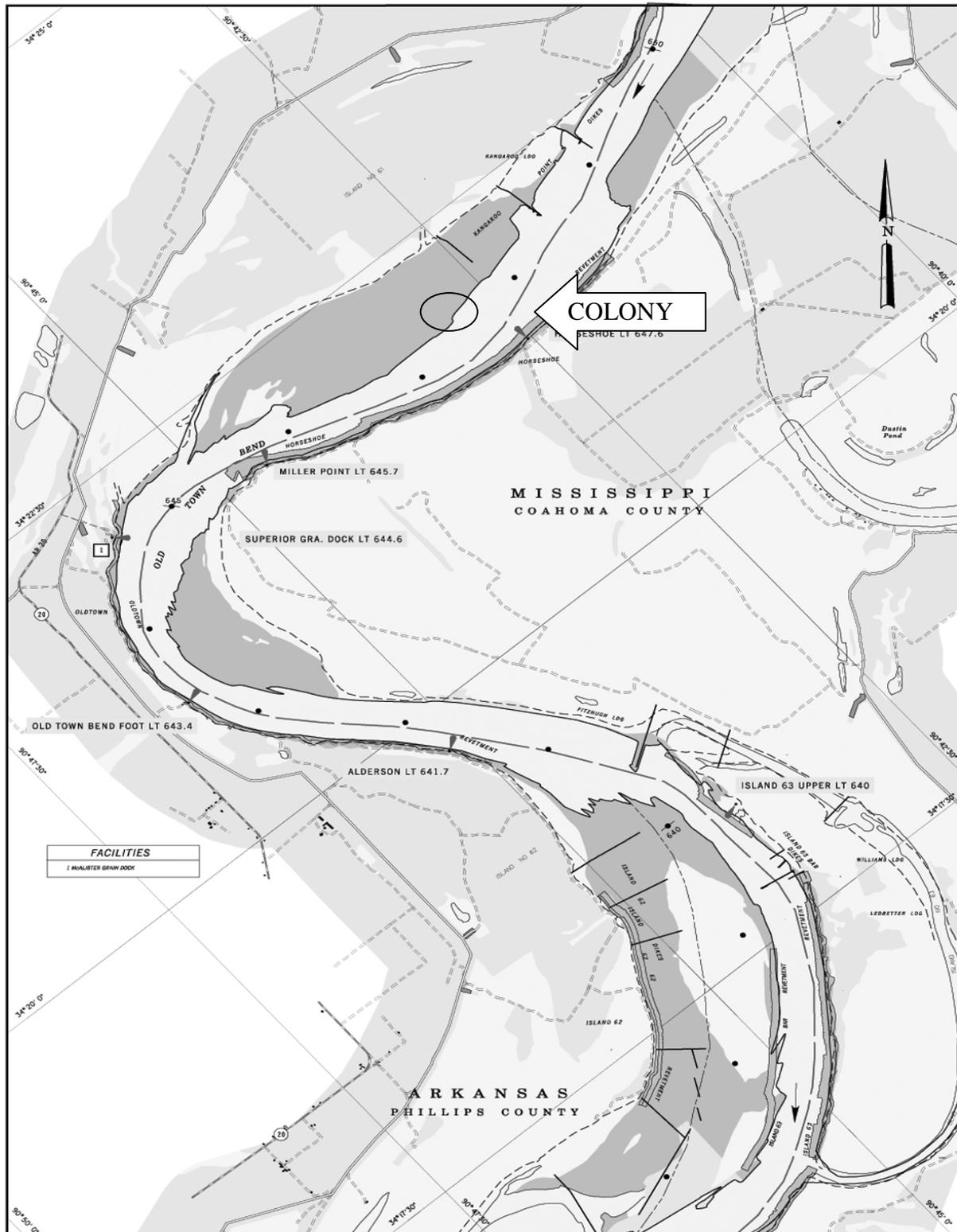
Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

A-I-20

MAP NO. 67



1998

Least Tern Survey – 2008

MAP NO. 68

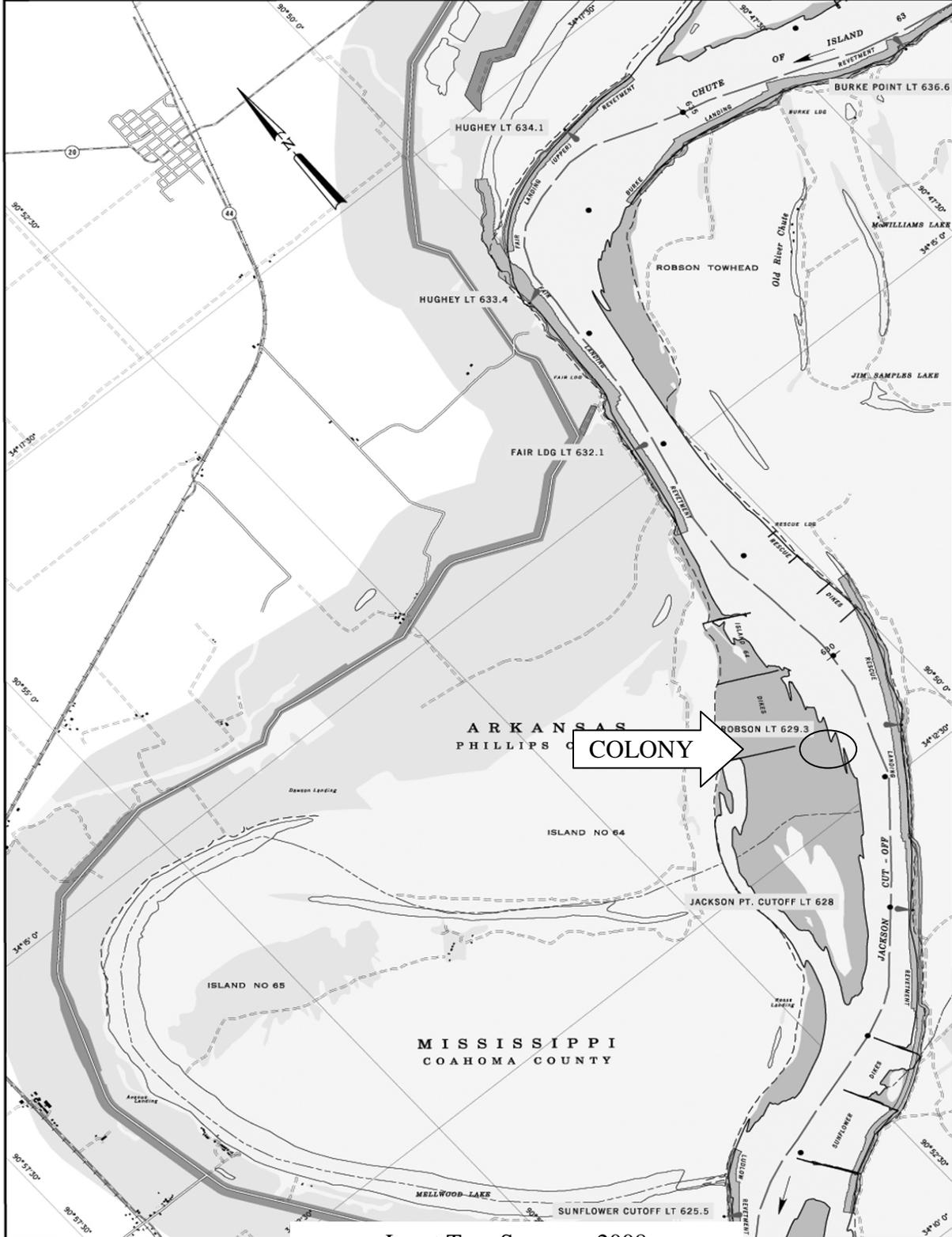
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

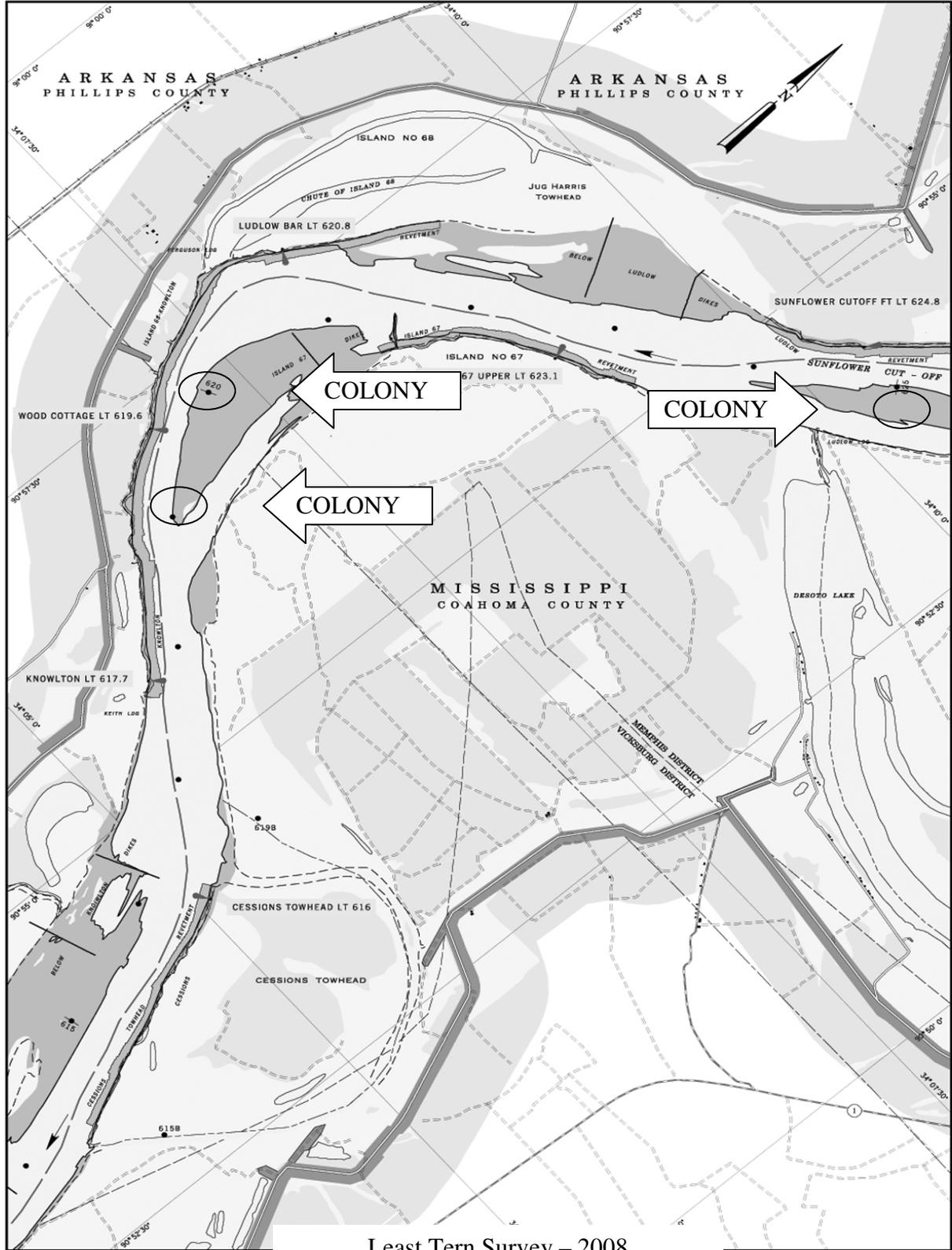
A-I-21



1998

MAP NO. 70

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-22



1998

Least Tern Survey – 2008

Mississippi River

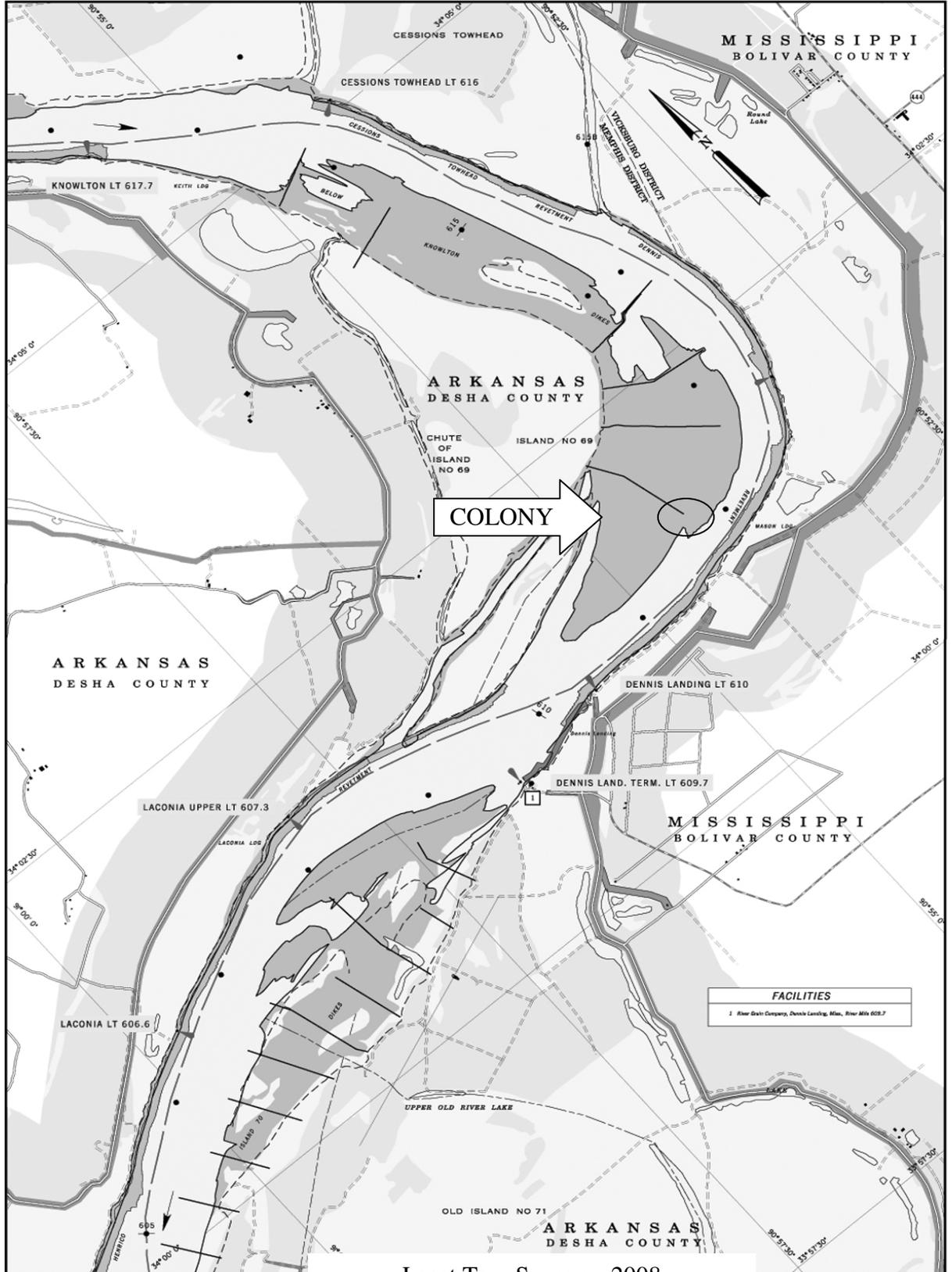
MAP NO. 72

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

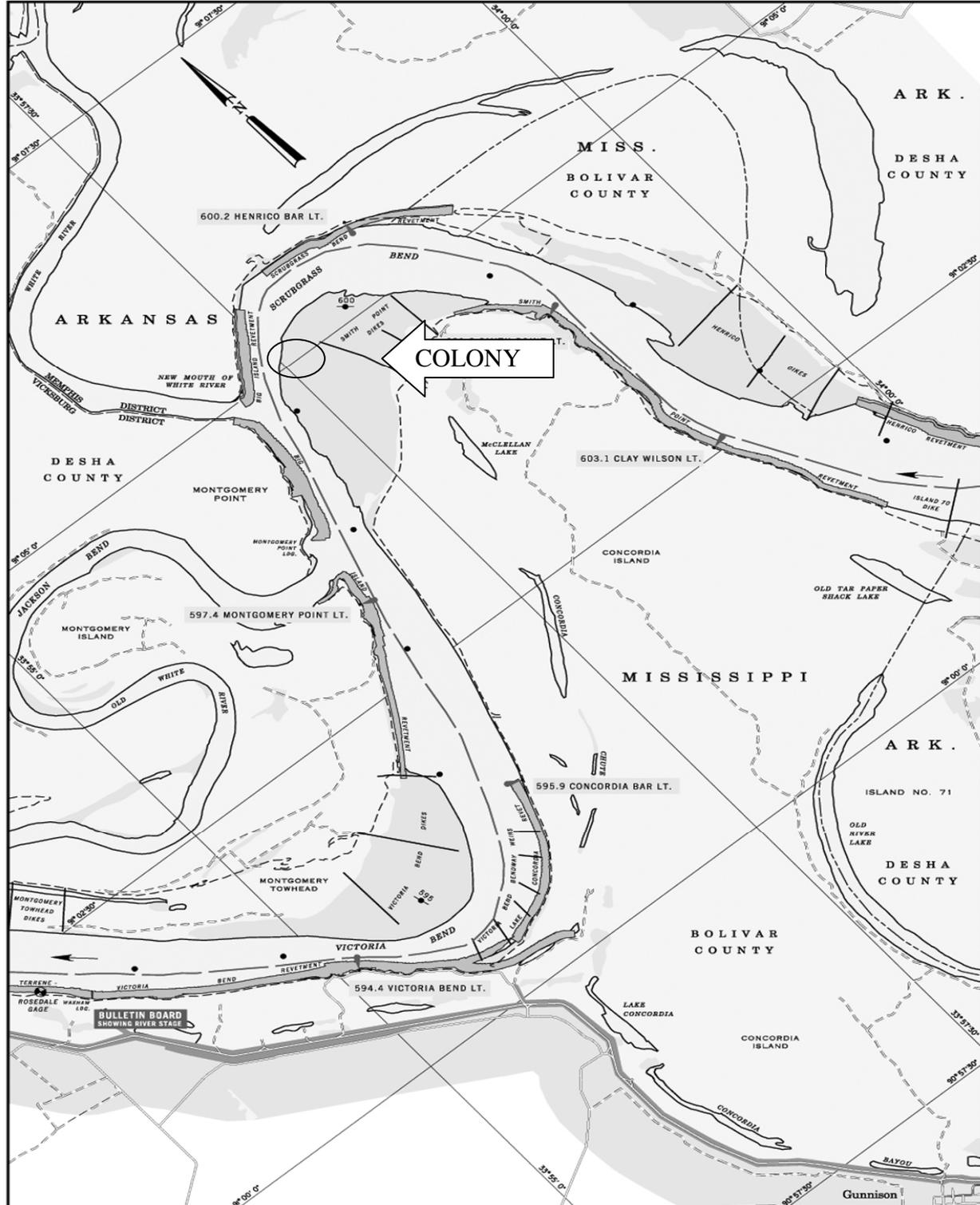
A-I-23



1998

MAP NO. 73

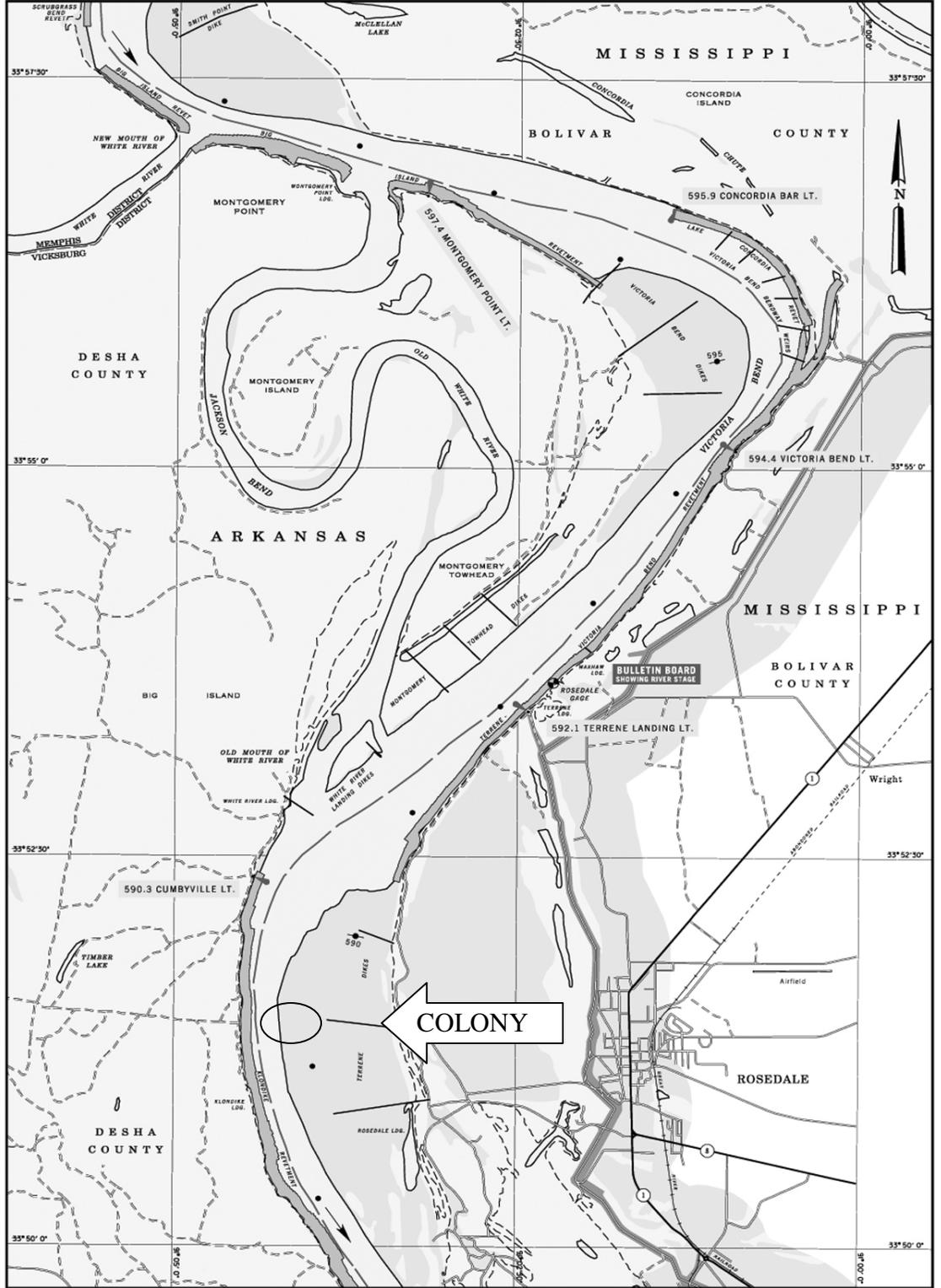
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-24



1998

MAP NO. 74

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-25

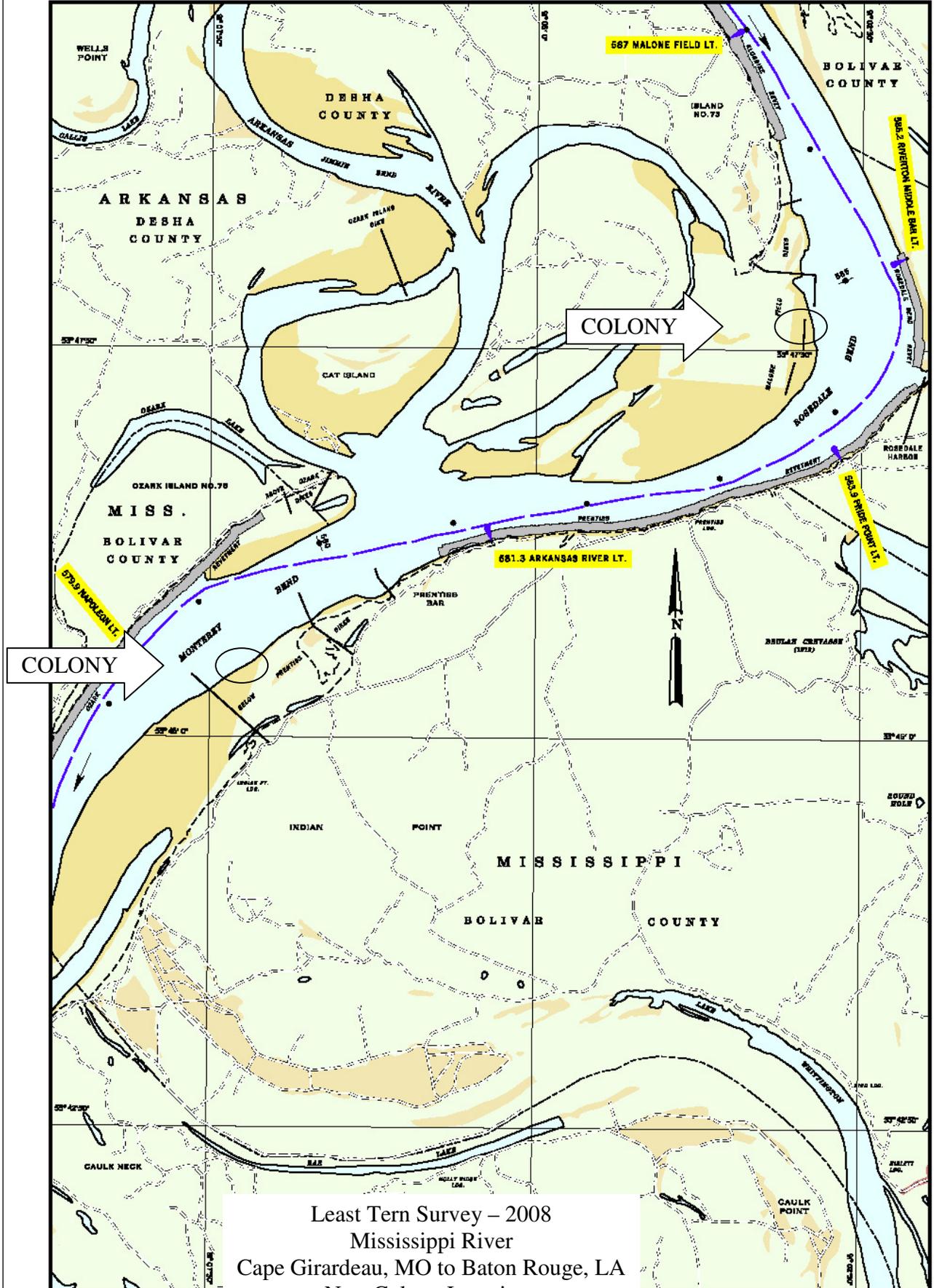


1998

SCALE 1:31,680
1 INCH = 1/2 MILE

MAP NO. 75

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-26

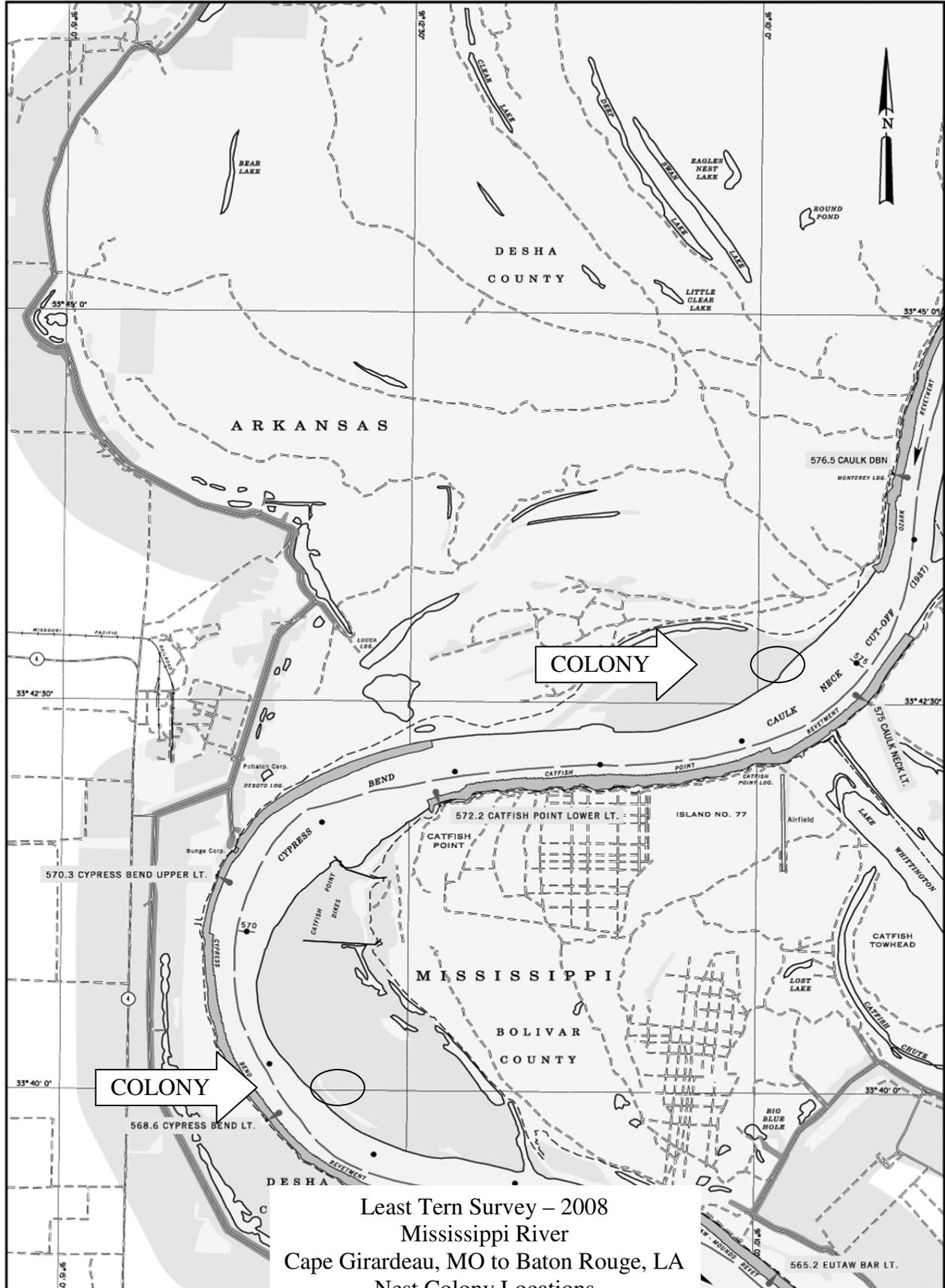


1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-27

MILE

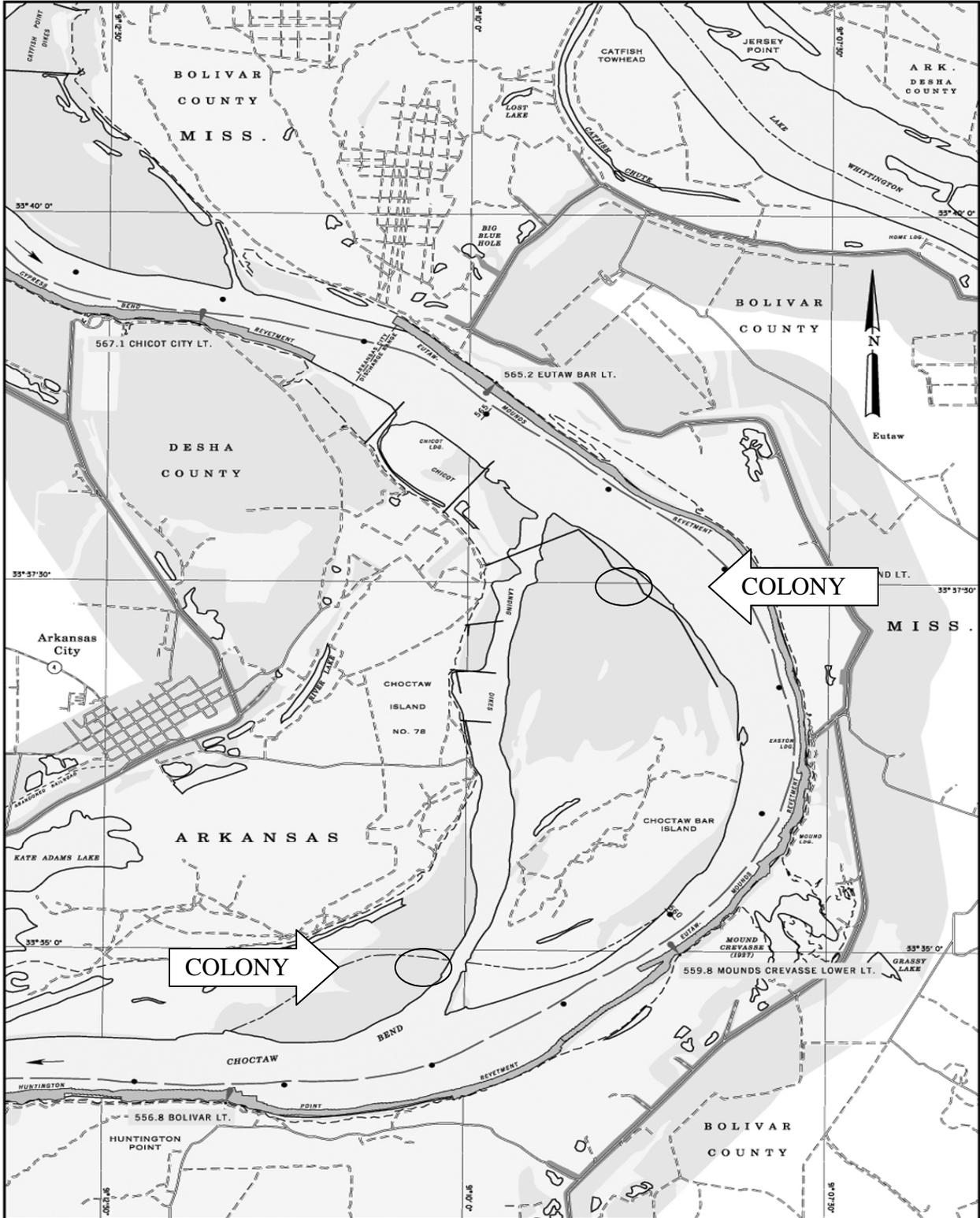
MAP NO. 76



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-28

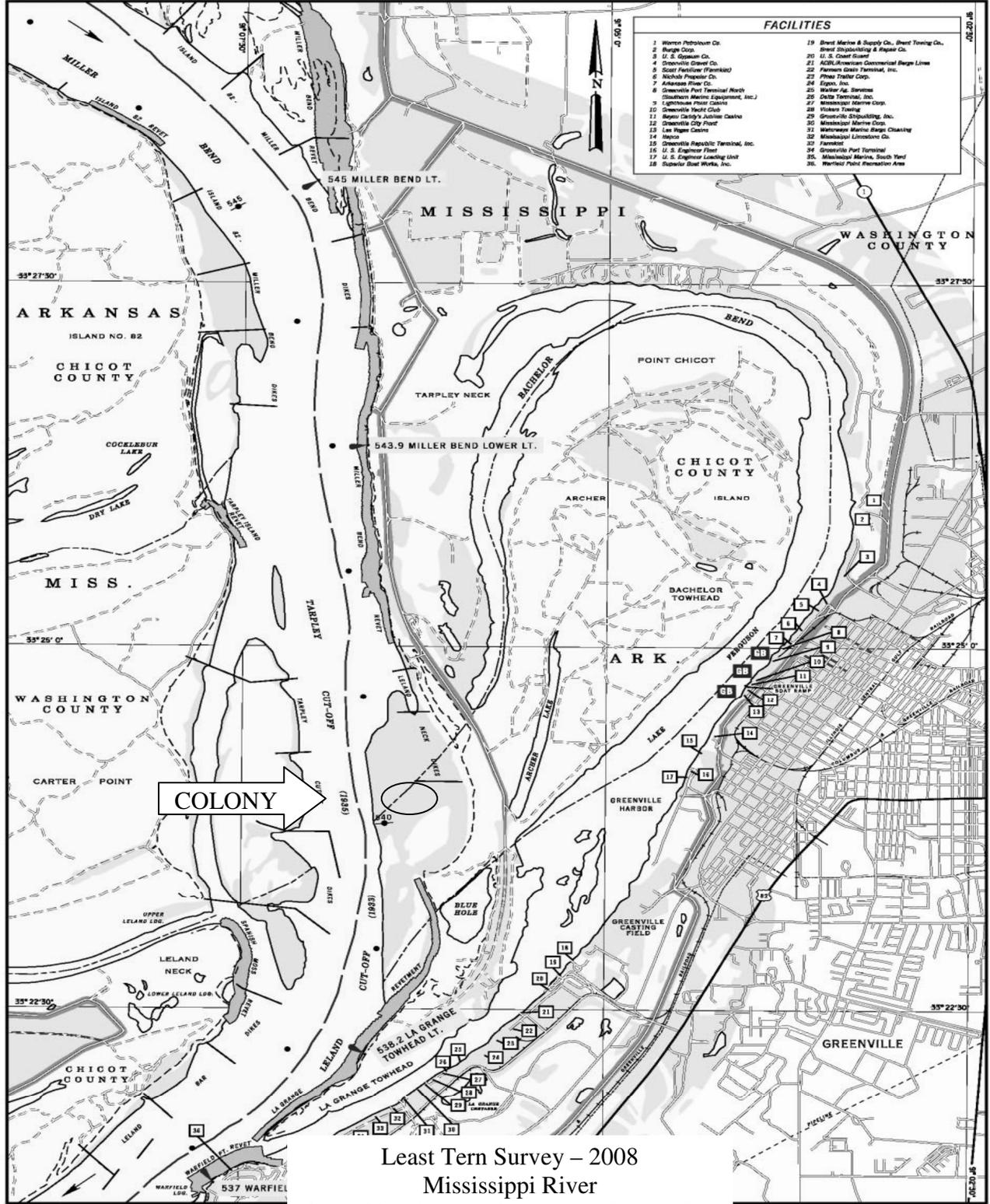
MAP NO. 77



1998

MAP NO. 78

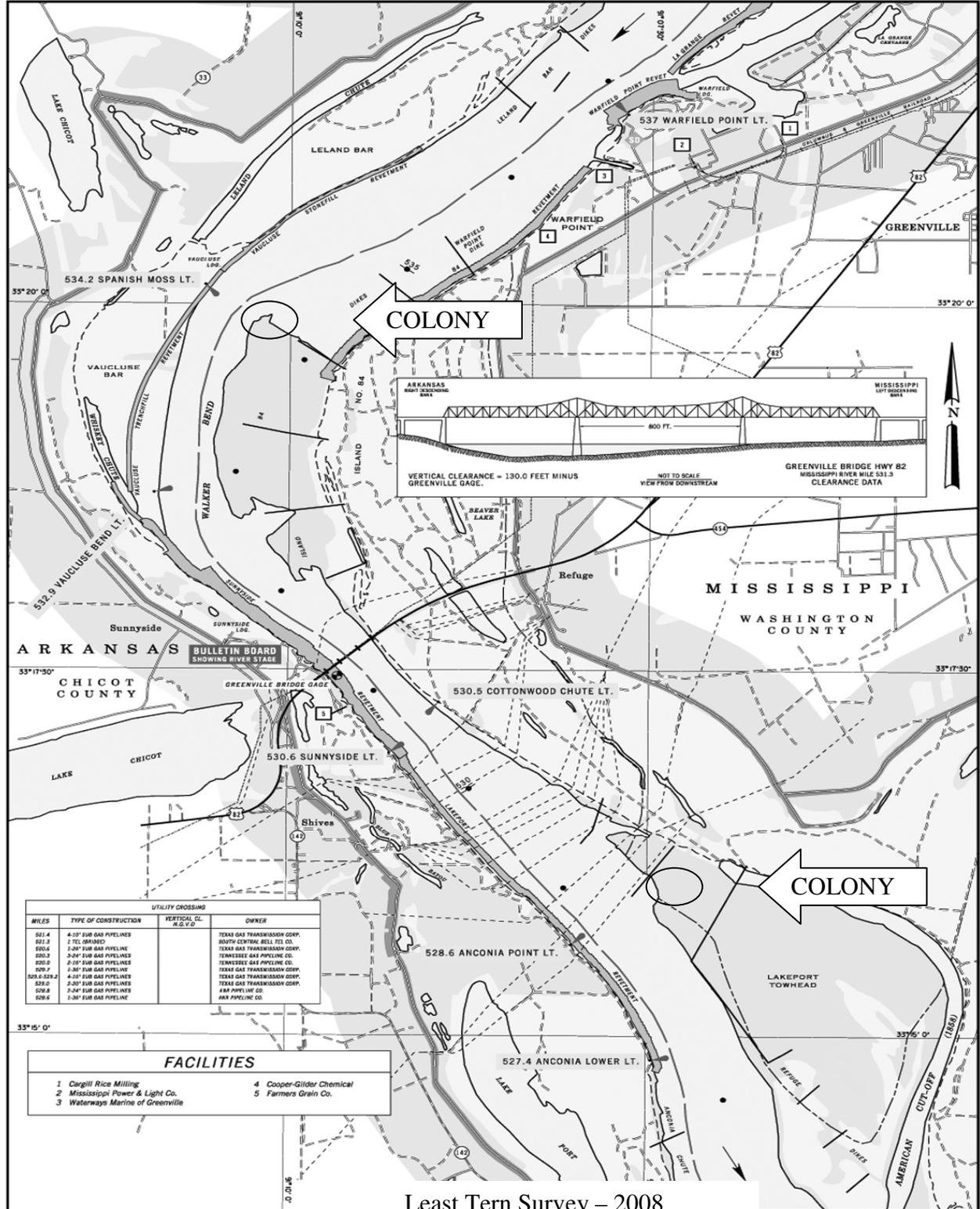
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-29



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-30

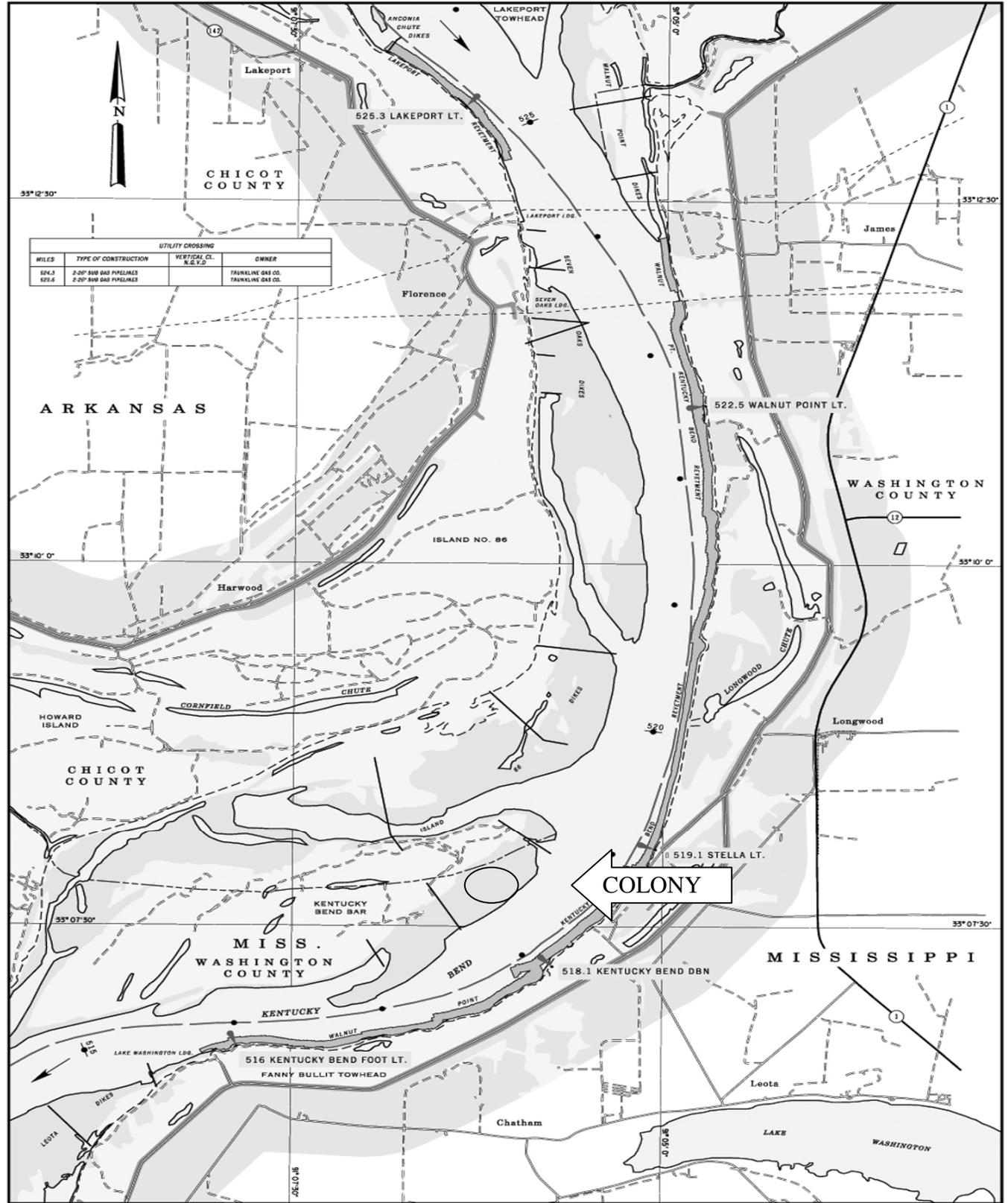
MAP NO. 80



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-31

MAP NO. 81

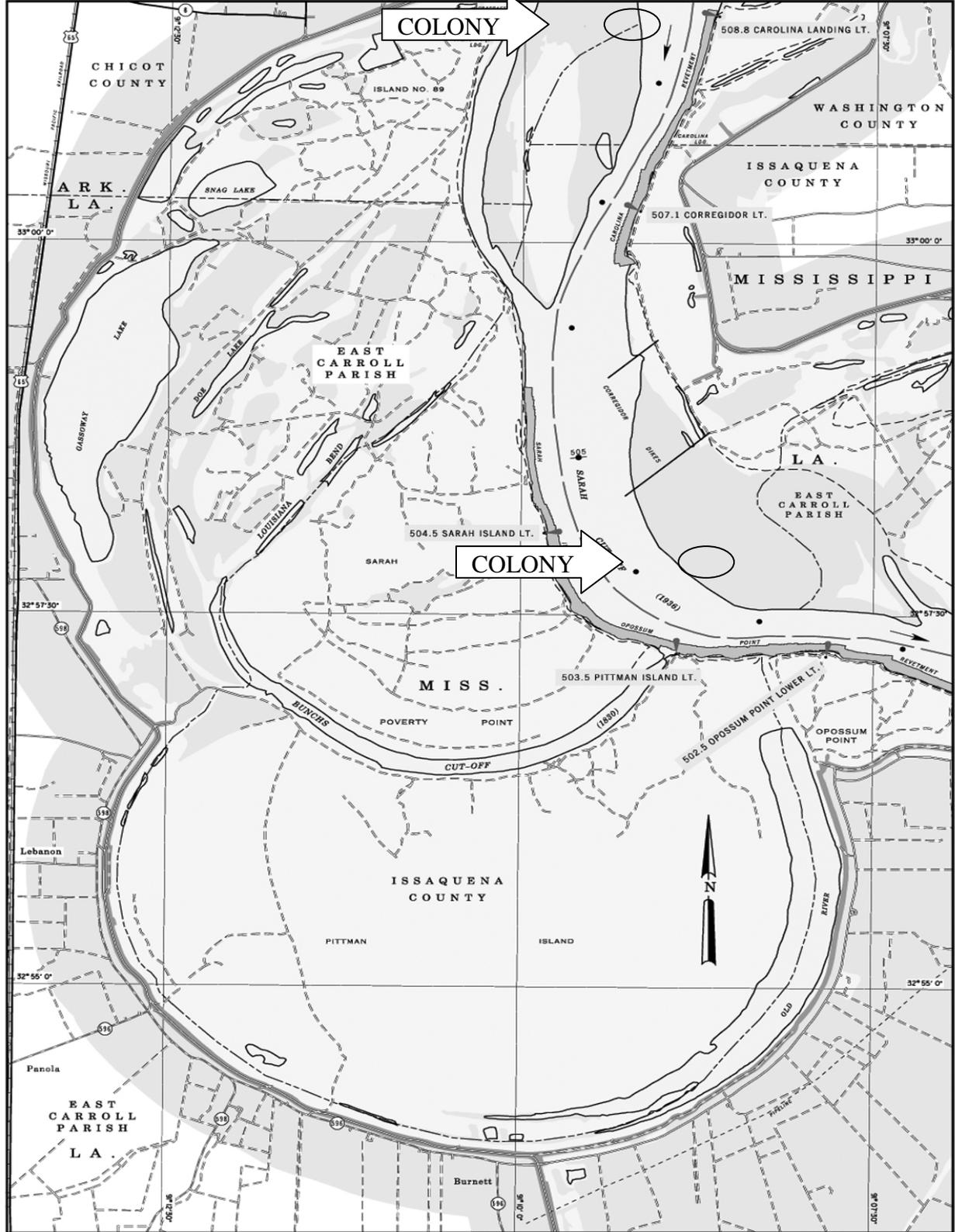


1998

SCALE 1:31,680
1 INCH = 1/2 MILE

MAP NO. 83

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-32

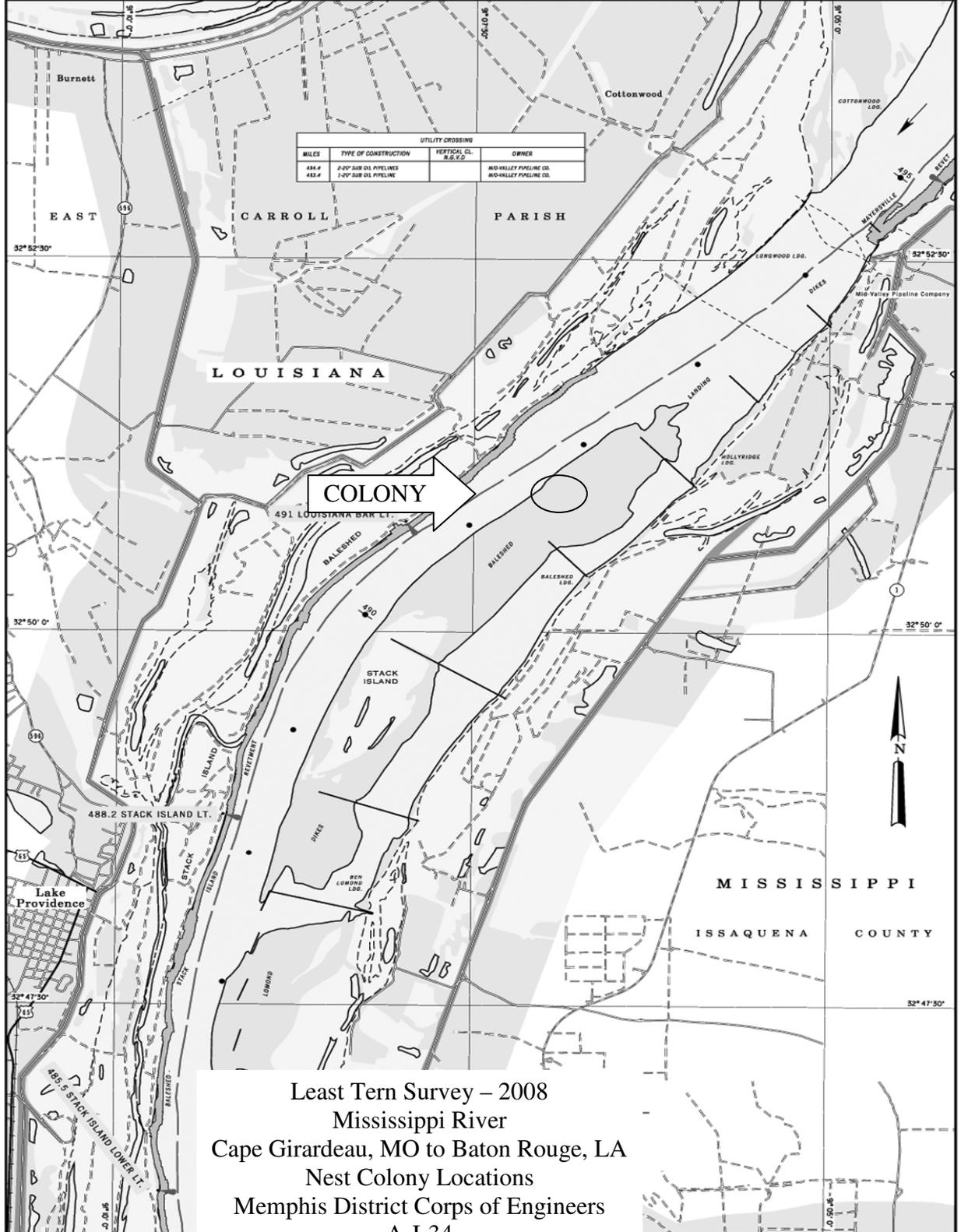


1998

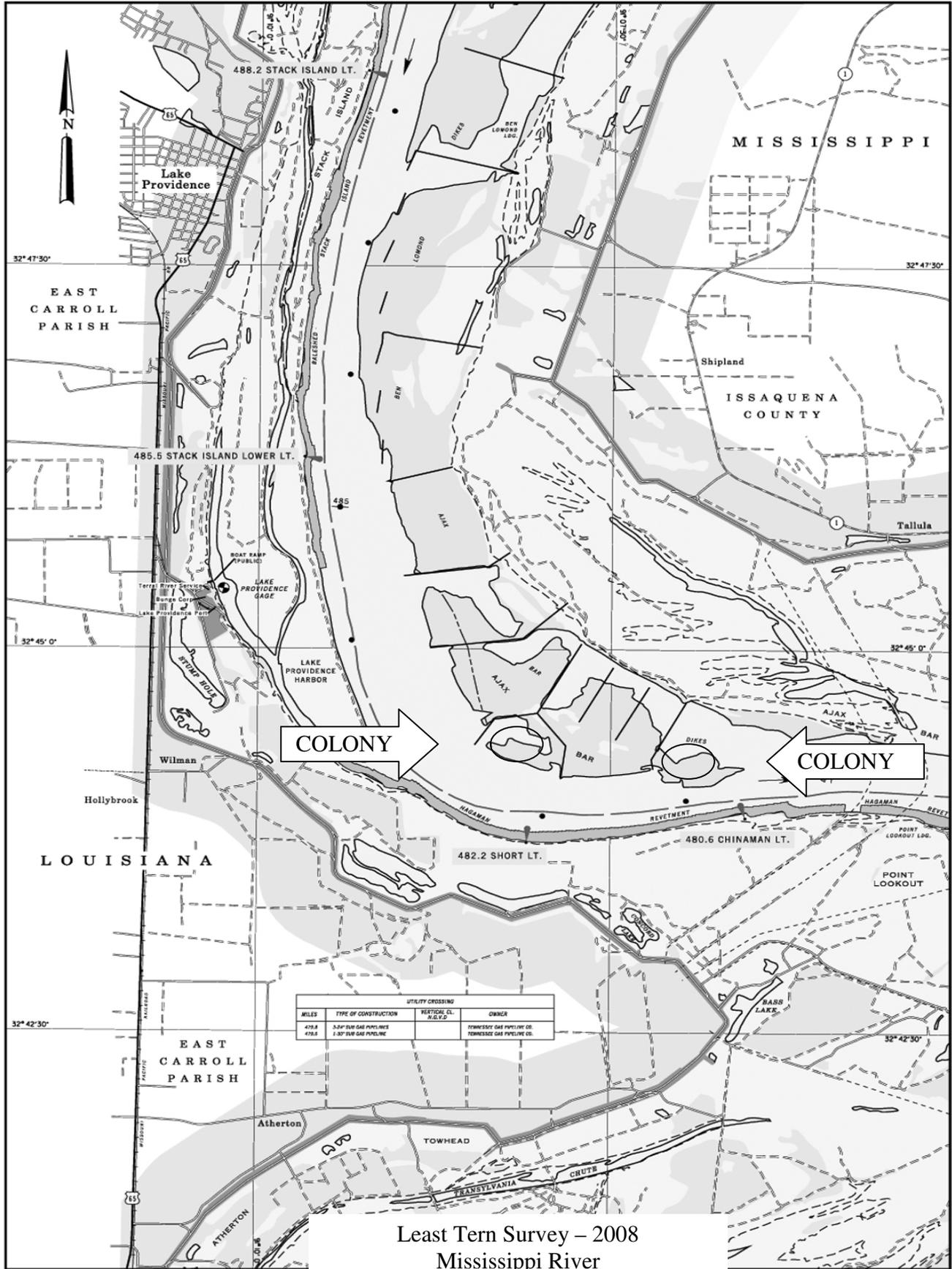
SCALE 1:31,680
1 INCH = 1/2 MILE

MAP NO. 85

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-33



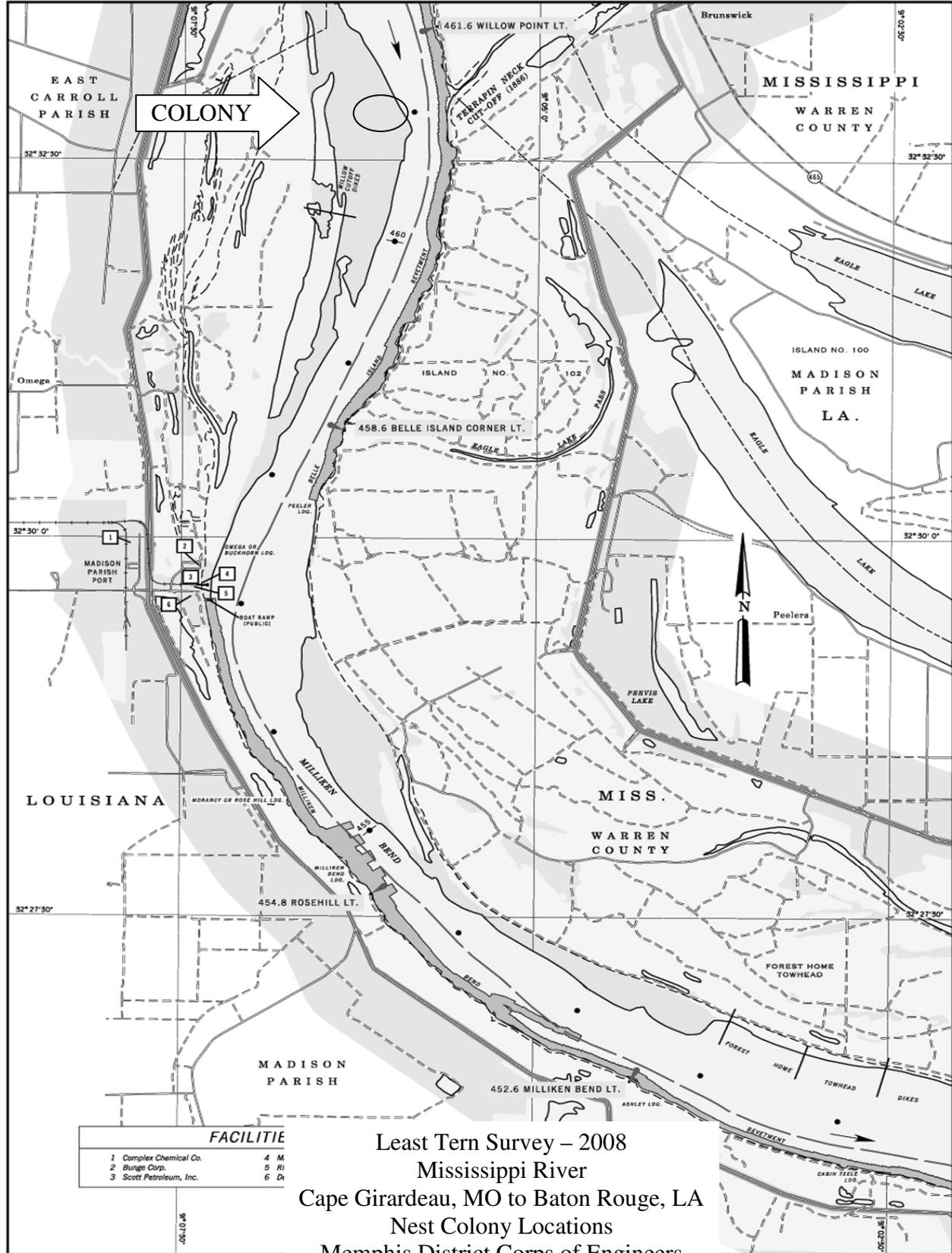
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-34



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-35

MAP NO. 88

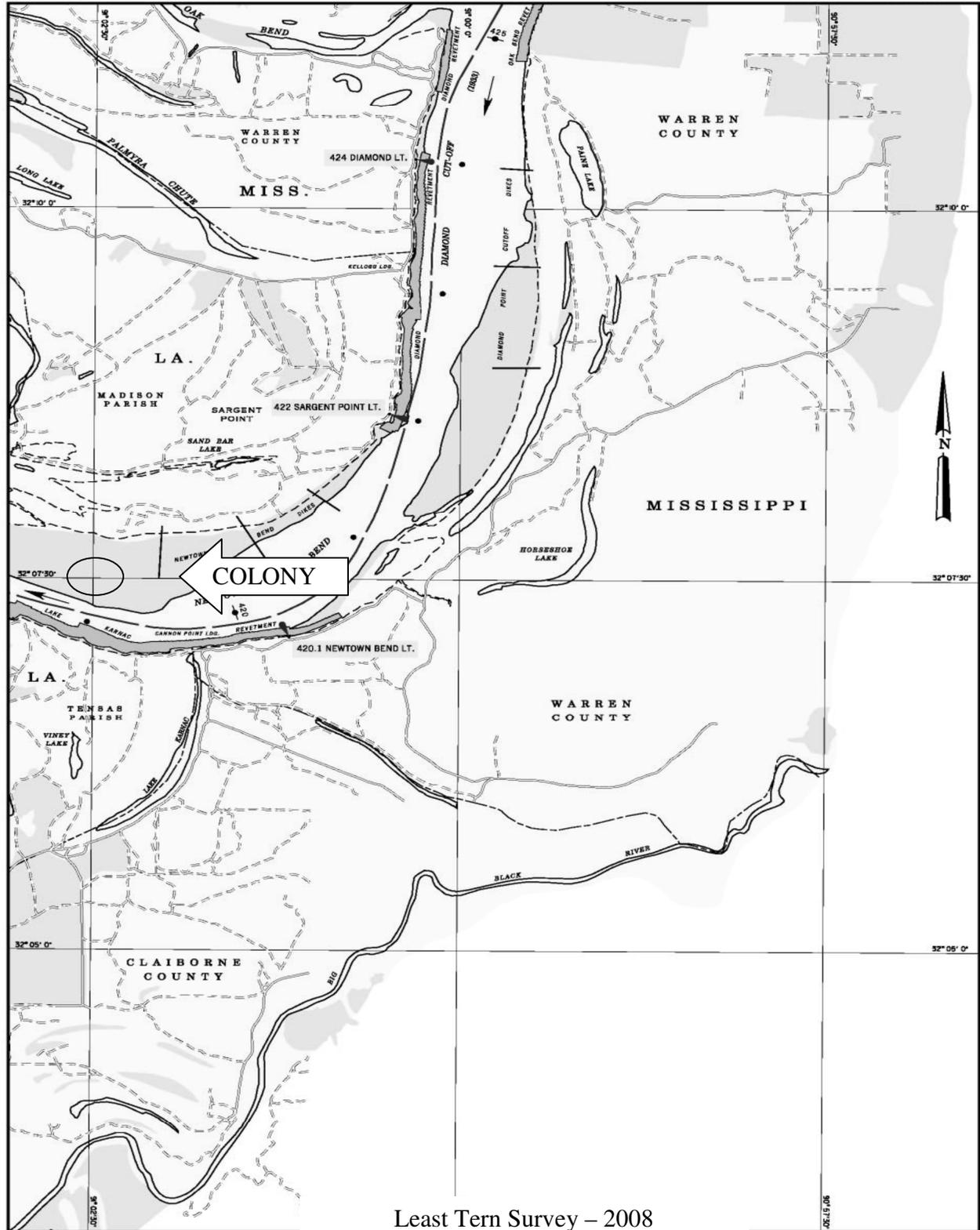


1998

FACILITIES	
1	Complex Chemical Co.
2	Bunge Corp.
3	Scott Petroleum, Inc.
4	M
5	RI
6	DI

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-36

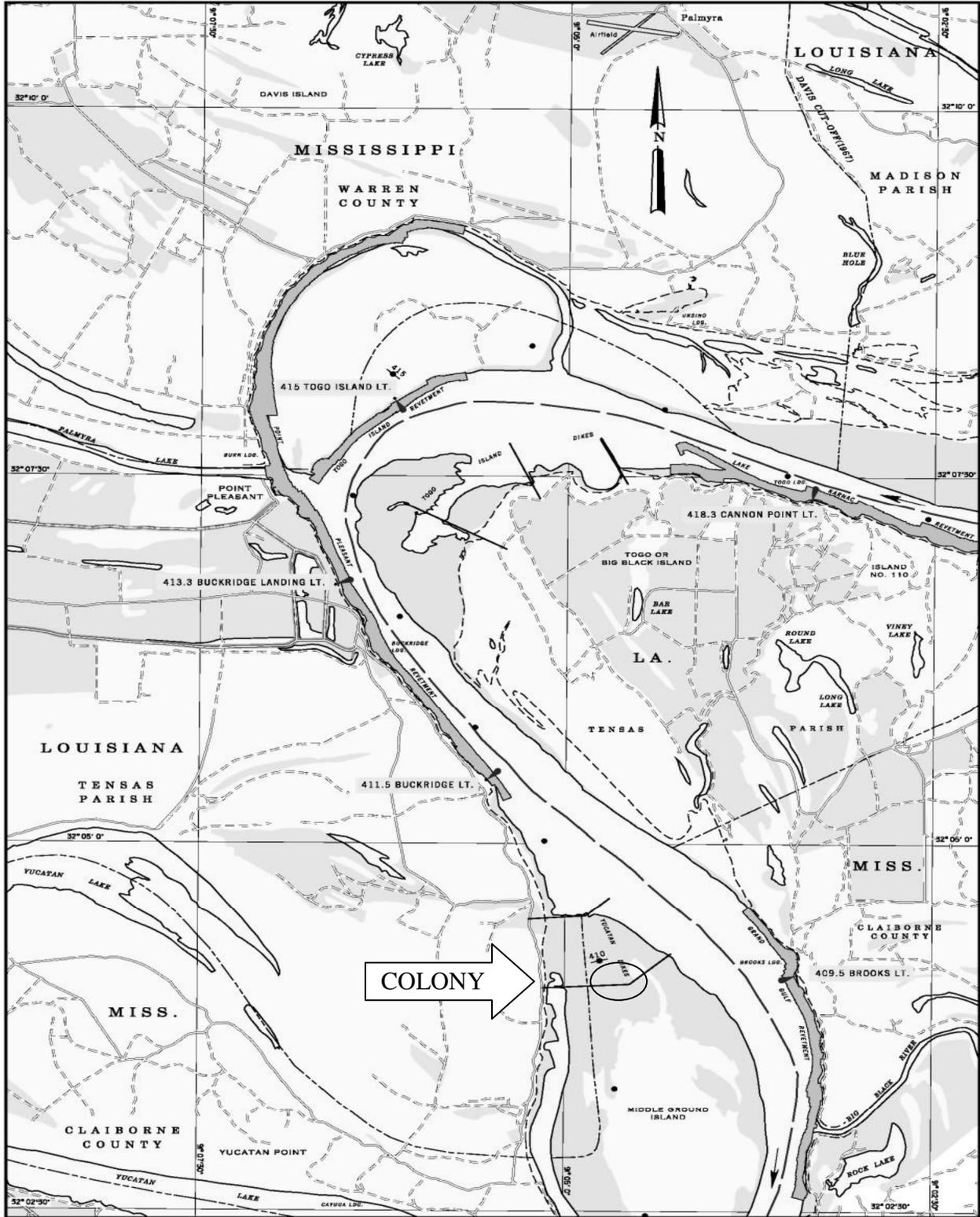
MAP NO. 92



1998

MAP NO. 98

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-37

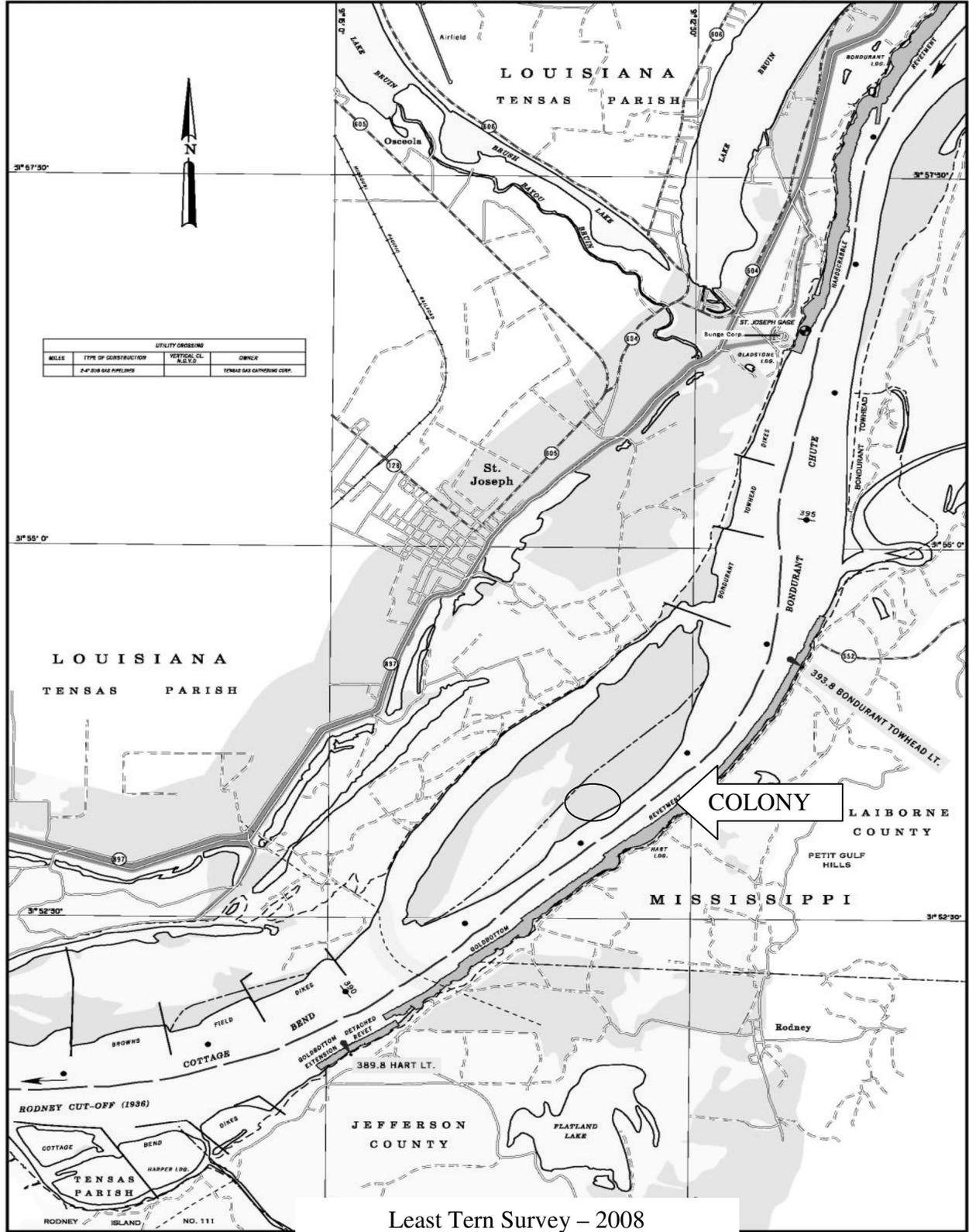


1998

SCALE 1:31,680
1 INCH = 170 MILES

MAP NO. 99

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-38



1998

MAP NO. 102

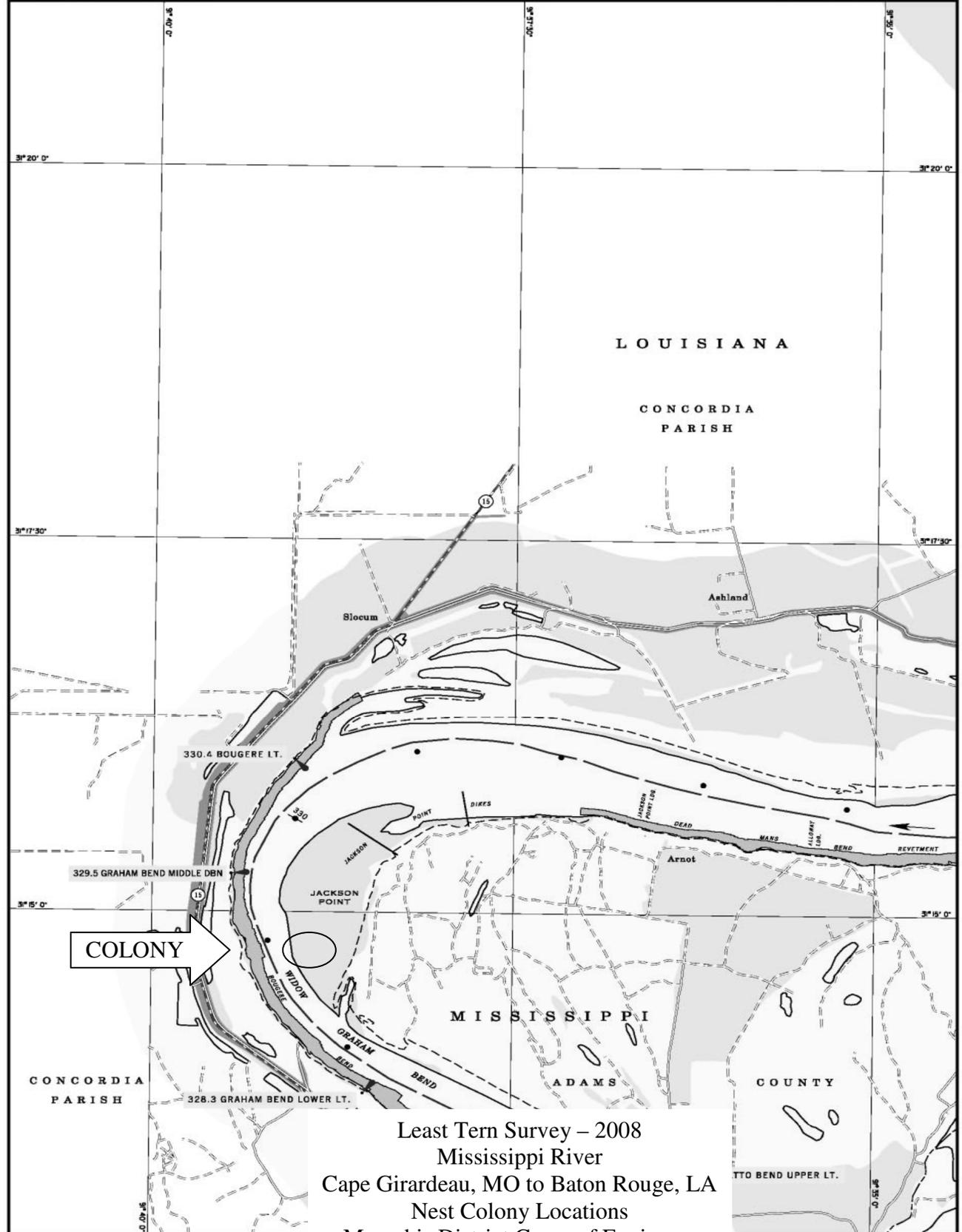
Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-39



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-40

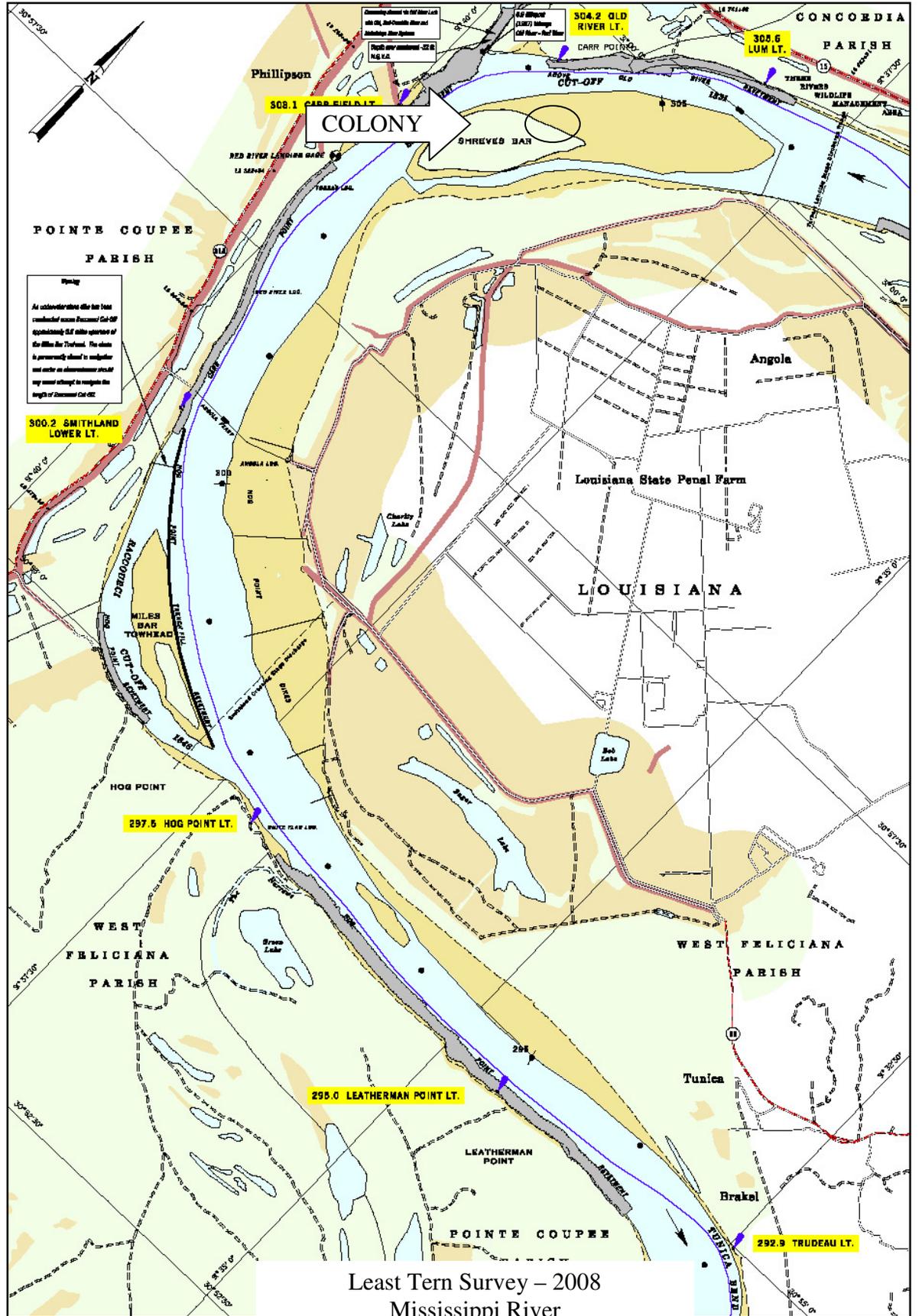
MAP NO. 103



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-41

MAP NO. 111



1998

Least Tern Survey – 2008
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-42

MAP NO. 114

Appendix A – II

LEAST TERN SURVEY - 2008

**Mississippi River
Cape Girardeau, MO to Baton Rouge, LA**

SMALL BOAT SURVEY July 26 – August 1, 2008

Memphis District, Corps of Engineers

Data Sheets

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 8:10 RIVER MILE UR 50.0

LOCALITY: Alexander ILL SITE NAME: Marquette Island
County/Parish State

WHERE SITED: Latitude: 37.2734
Longitude: 89.5246

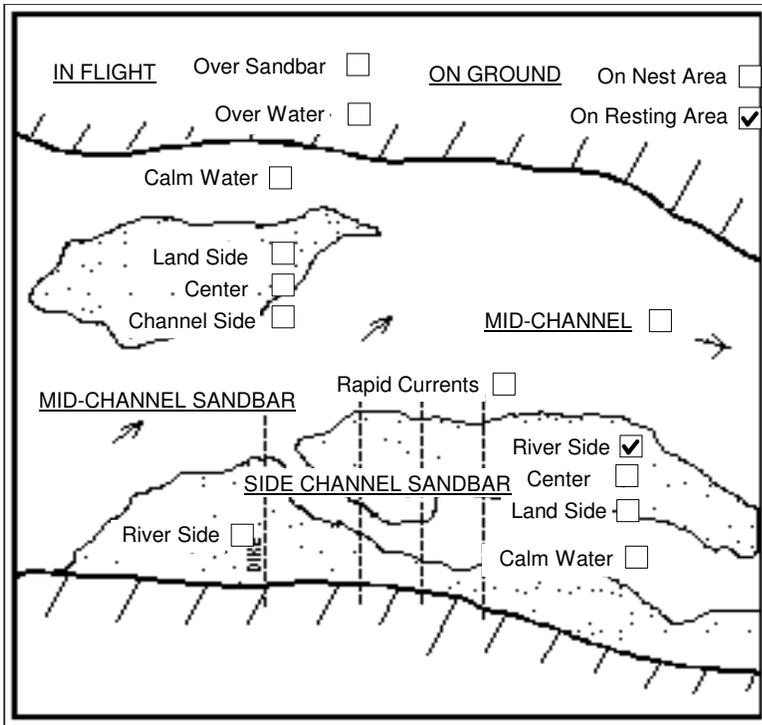
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 21
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows
Distance: 150 Feet

FIELD CONDITION:
Temperature: 80 °F
Rain: No
Wind: Calm
% Cloud: 50%



OTHER NOTES:

Left Bank. Small, low attached sand bar.

ILL side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cape Girardeau = 28.7 R
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 8:47 RIVER MILE UR 30.8

LOCALITY: Alexander ILL SITE NAME: Bumgard Island
County/Parish State

WHERE SITED: Latitude: 37.0416
Longitude: 89.3757

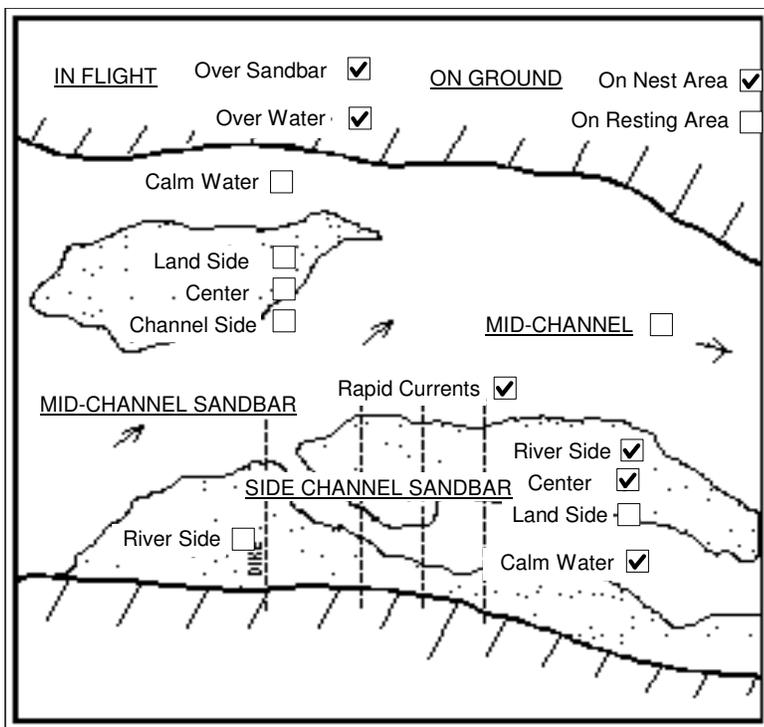
Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:
Adults: 102
Juveniles: _____
Eggs: _____
Nests: 23
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 82 °F
Rain: No
Wind: calm
% Cloud: 70%



OTHER NOTES:

Left Bank. Low, flat, wet sand and pea-gravel bar (3/4 mile long x 1/4 mile wide) with ripple lines. Fishing, courting, carrying fish, resting both sides, 23 sitting inland on scrapes. Coyote tracks and fingerling Silver Carp. Two Great Blue Herons, 1 Red-Tailed Hawk in vicinity and 1 Bald Eagle 5 miles upstream with Rough Wing Swallows & Mourning Doves.

ILL side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cape Girardeau = 28.7 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 10:11 RIVER MILE UR 3.0

LOCALITY: Alexander ILL SITE NAME: Greenfield Bend
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 1
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

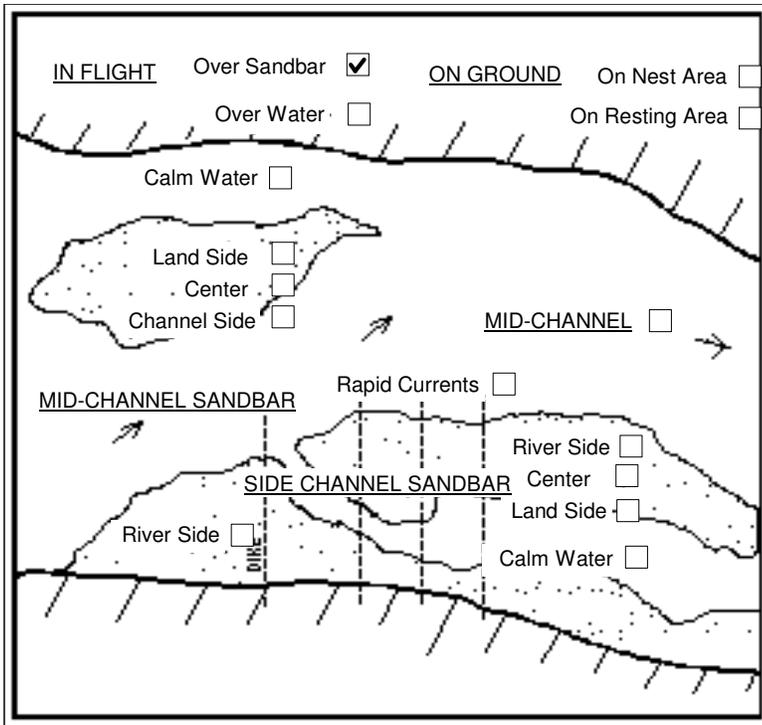
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 80%



OTHER NOTES:

Left Bank. One tern in transit, 1 Great Blue Heron and 23 Canada Geese on bar.

ILL

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cairo = 25.0 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 10:44 RIVER MILE 946.0

LOCALITY: Carlisle KY SITE NAME: Island #1 Dikes
County/Parish State

WHERE SITED: Latitude: 36.8882
Longitude: 89.1163

Approximate Distance to Water: 10 Feet

NUMBERS SIGHTED:

Adults: 302
Juveniles: 1
Eggs: 0
Nests: 15
Chicks: Yes

SUBSTRATE:

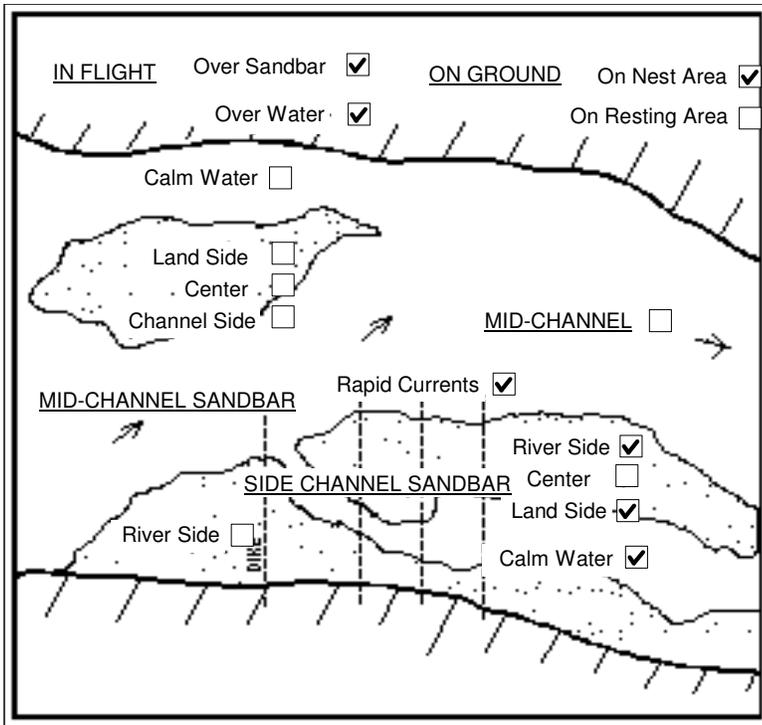
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: calm
% Cloud: 90%



OTHER NOTES:

Left Bank. Low, flat, unattached, barely emergent, 1/2 mile long x 200 yds. wide sand bar.. Drift count only with 15 observed sitting inland on presumed nests. First juvenile tern observed. Fifteen Great Blue Herons and 1 Black Tern.

KY side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cairo = 25.0 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 11:36 RIVER MILE 931.5

LOCALITY: Hickman KY SITE NAME: Wolf Island Bar
County/Parish State

WHERE SITED: Latitude: 36.6995
Longitude: 89.1498

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 177
Juveniles: _____
Eggs: 1(1) 1(3)
Nests: 7
Chicks: No

SUBSTRATE:

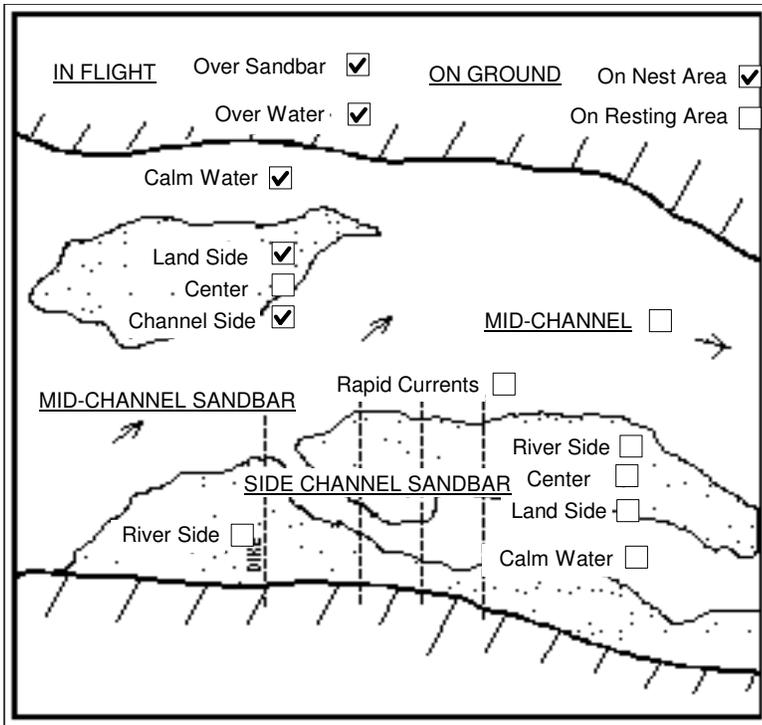
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: N 3-5 mph
% Cloud: 100%



OTHER NOTES:

Left Bank. Large, mid-channel, undulating, high, sand bar with small wrack lines and ripples containing nests. Fishing, breasting, courting and resting on both sides, no tracks or disturbance noted. Two Bald Eagles, 4 Caspian Terns, 1 Great Blue Heron, 1 Fish Crow in vicinity.

KY side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cairo = 25.0 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 12:34 RIVER MILE 924.8

LOCALITY: Fulton KY COUNTY/PARISH STATE SITE NAME: Beckwith Bend

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 4
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

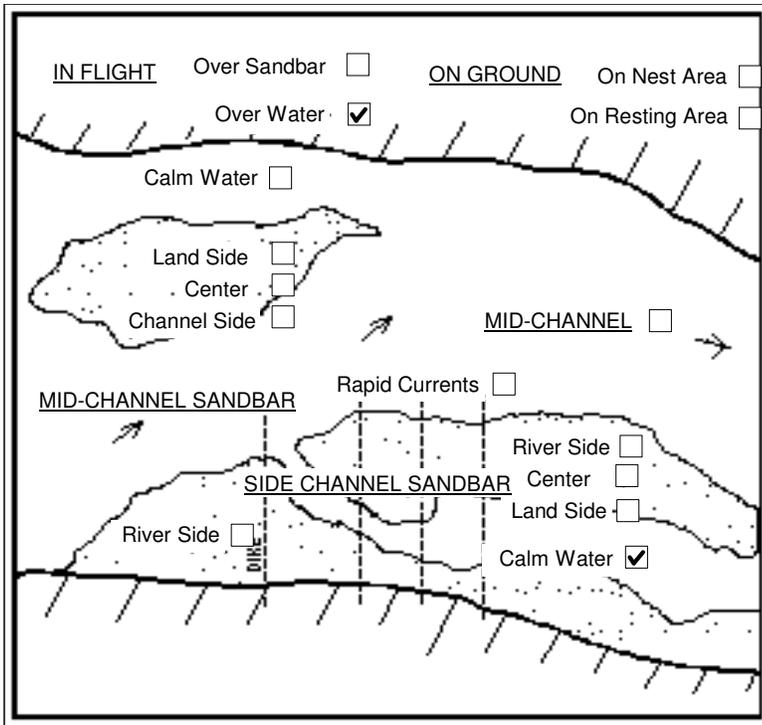
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: N 5 mph
% Cloud: 100%



OTHER NOTES:

Left Bank. Left Bank. Four fishing in back chute.

_____ KY side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cairo = 25.0 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 13:58 RIVER MILE 908.0

LOCALITY: Fulton KY COUNTY/Parish State SITE NAME: Kelly Landing

WHERE SITED: Latitude: 36.5396
Longitude: 89.4005

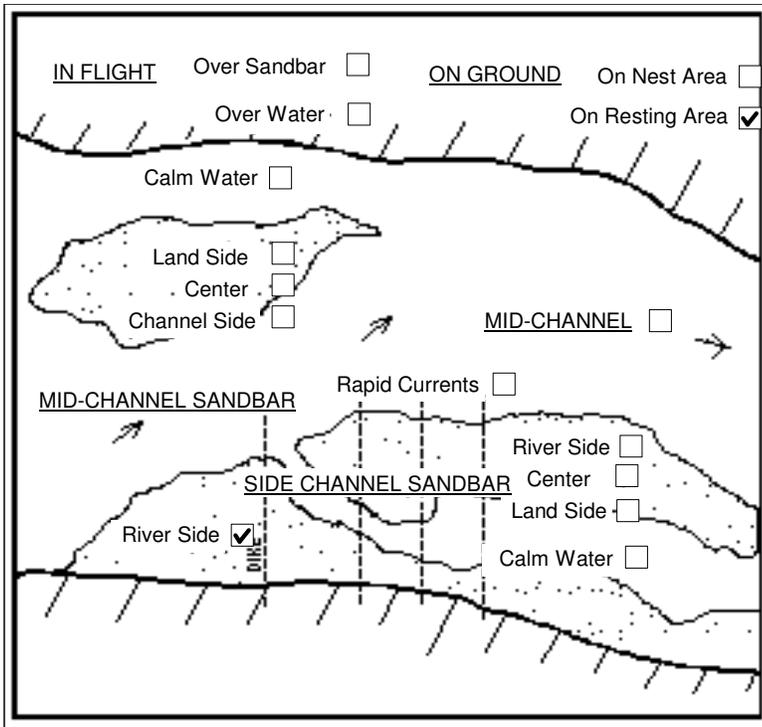
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 7
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 88 °F
Rain: No
Wind: N 5 mph
% Cloud: 80%



OTHER NOTES:

Left Bank. Solid gravel resting bar attached to left bank. One hundred tree swallows observed 3 miles upstream Island #8.

KY side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Cairo = 25.0 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 14:20 RIVER MILE 895.0

LOCALITY: New Madrid MO SITE NAME: Hotchkiss Bend Dikes
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 1
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

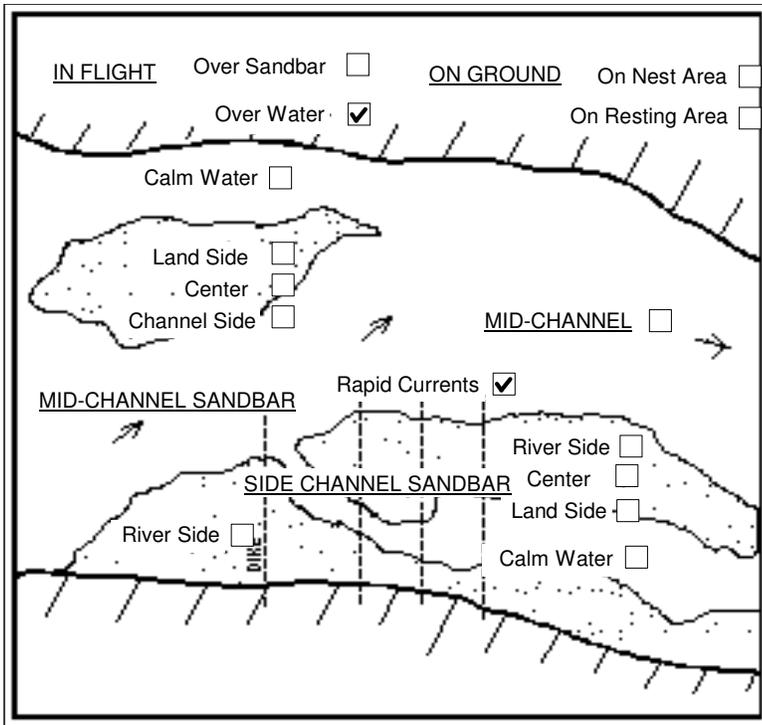
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 87 °F
Rain: No
Wind: N 5 mph
% Cloud: 60%



OTHER NOTES:

One tern fishing between dikes.

MO side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: New Madrid = 15.3 S
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 14:55 RIVER MILE 884.0

LOCALITY: Fulton KY COUNTY/Parish State SITE NAME: Kentucky Point Dikes Upper

WHERE SITED: Latitude: 36.51475
Longitude: 89.5498

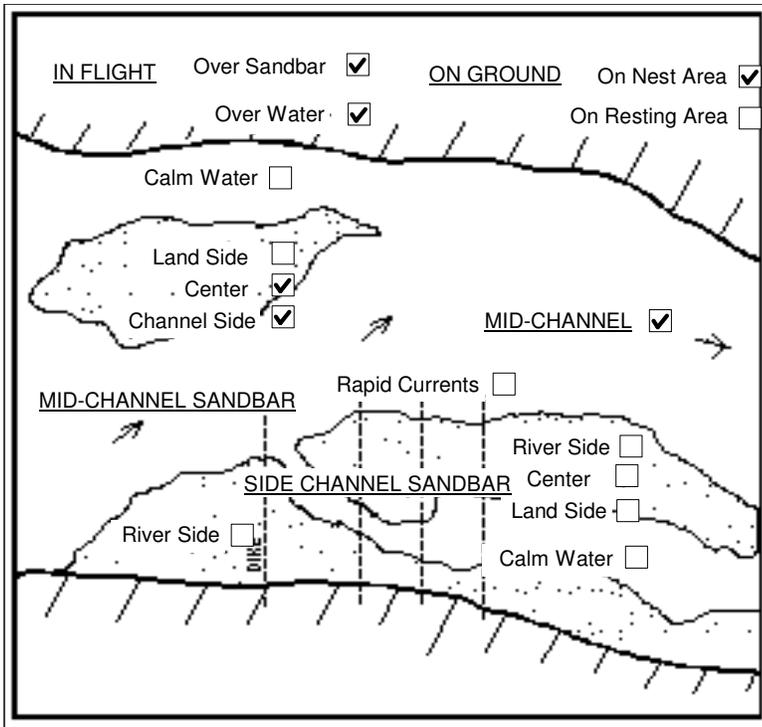
Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:
Adults: 509
Juveniles:
Eggs: 4(1) 6(2)
Nests: 87
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type:
Distance: Feet

FIELD CONDITION:
Temperature: 88 °F
Rain: No
Wind: N 5mph
% Cloud: 50%



OTHER NOTES:

Left Bank. Low, flat-topped sand bar, unattached. Birds breasting and mobbing, early stages of nesting. Signs of avian predation. Three carp, one Threadfin Shad. One Great Blue Heron and six boats with daycampers at waterline

KY side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: New Madrid = 15.3 S
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 15:19 RIVER MILE 883.2

LOCALITY: Fulton KY SITE NAME: Kentucky Point Dikes Lower
County/Parish State

WHERE SITED: Latitude: 36.5076
Longitude: 89.5433

Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:

Adults: 52
Juveniles: _____
Eggs: 7(1) 15(2) 4(3)
Nests: 26
Chicks: No

SUBSTRATE:

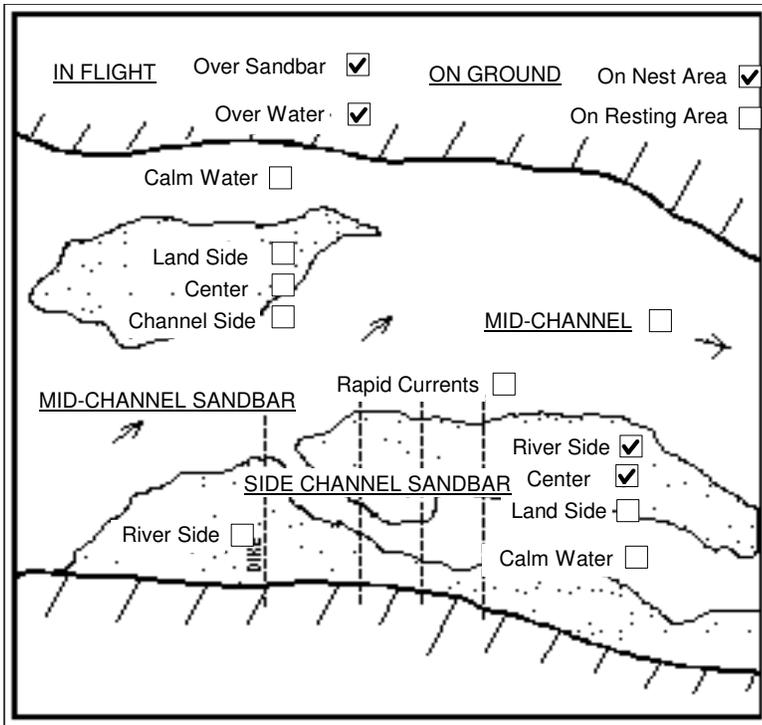
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: N 5 mph
% Cloud: 30%



OTHER NOTES:

Left Bank. Just downstream from previous colony, low unattached sandbar. No sign of disturbance.

_____ KY side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: New Madrid = 15.3 S
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 15:44 RIVER MILE 877.0

LOCALITY: Lake TN SITE NAME: Marr Towhead
County/Parish State

WHERE SITED: Latitude: 36.4236
Longitude: 89.5393

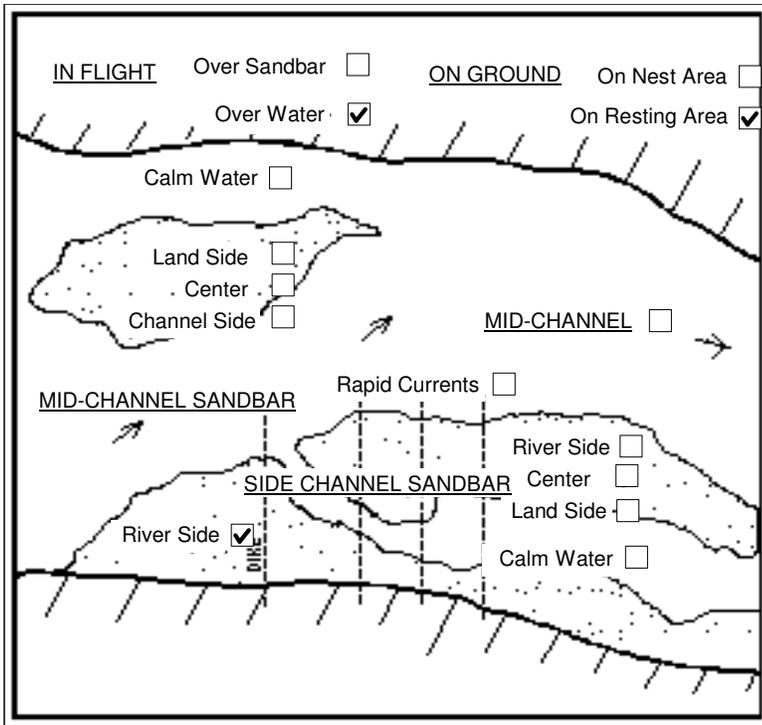
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 18
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 89 °F
Rain: No
Wind: N 5 mph
% Cloud: 15%



OTHER NOTES:

Left Bank. Small, low, unattached (100 x 40 ft.) riverside bar with birds resting at waterline . Day campers 1 mile downstream.

TN side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 16:04 RIVER MILE 871.5

LOCALITY: New Madrid MO SITE NAME: Stewart Towhead Dikes Upper
County/Parish State

WHERE SITED: Latitude: 36.35763
Longitude: 89.51528

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 176
Juveniles: _____
Eggs: _____
Nests: 12
Chicks: No

SUBSTRATE:

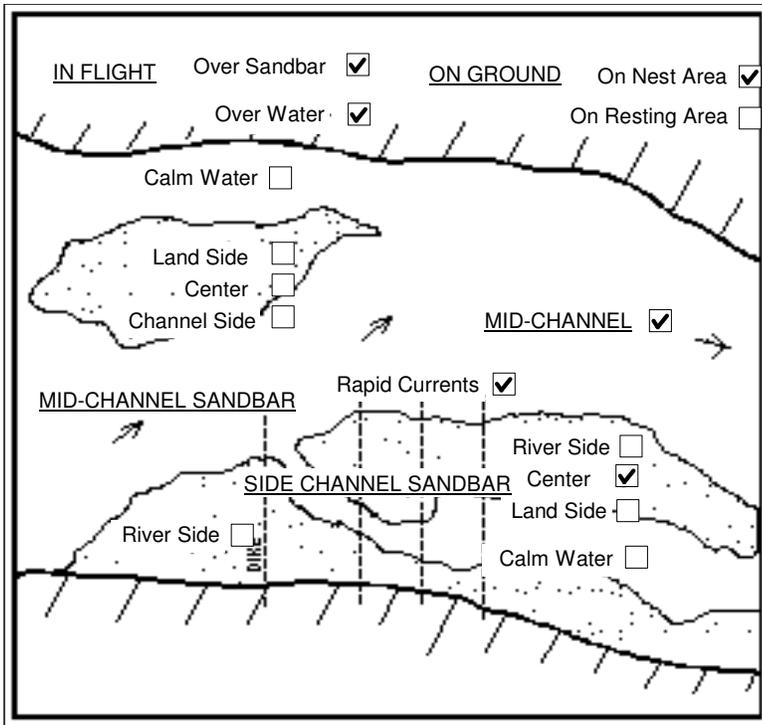
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 92 °F
Rain: No
Wind: N 5 mph
% Cloud: 10%



OTHER NOTES:

Right Bank. Flat, gravel and sand bar with most birds resting at waterline, some fishing both sides. Four Black Terns, 3 Great Blue Herons, 6 Purple Martins but no signs of disturbance.

MO side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 16:18 RIVER MILE 870.5

LOCALITY: New Madrid MO SITE NAME: Stewart Towhead Dikes Lower
County/Parish State

WHERE SITED: Latitude: 36.34634
Longitude: 89.52654

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 60
Juveniles: _____
Eggs: _____
Nests: 6
Chicks: No

SUBSTRATE:

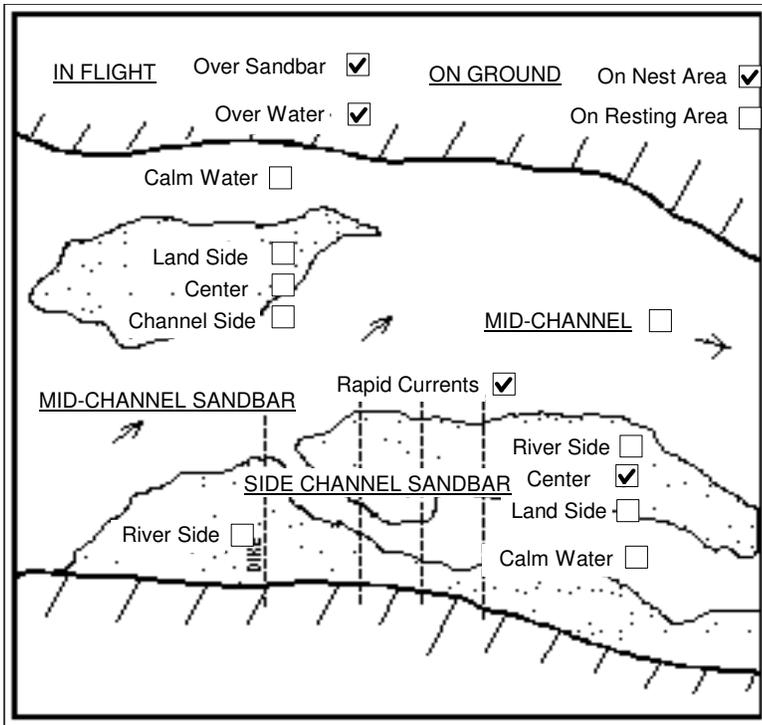
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 92 °F
Rain: No
Wind: N 5 mph
% Cloud: 10%



OTHER NOTES:

Right Bank. Downstream of colony measured in previous data sheet with nests on higher center. No signs of disturbance.

MO side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 16:30 RIVER MILE 864.5

LOCALITY: Lake TN SITE NAME: Below Cherokee Dikes
County/Parish State

WHERE SITED: Latitude: 36.3316
Longitude: 89.6174

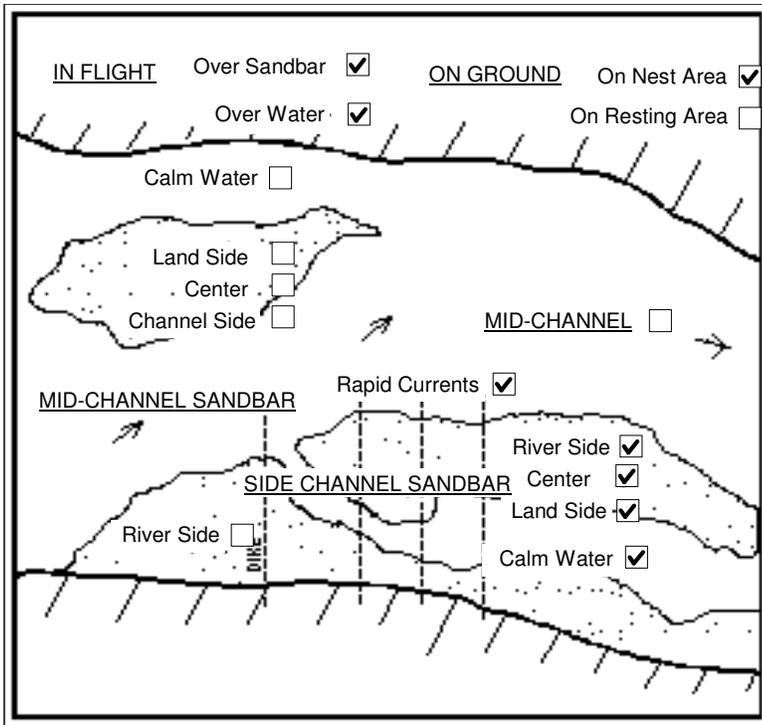
Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:
Adults: 224
Juveniles: _____
Eggs: 1(1) 4(2) 1(3)
Nests: 8
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 92 °F
Rain: No
Wind: N 10 mph
% Cloud: 10%



OTHER NOTES:

Left Bank. Unattached, very large, broad, gently sloping bar of solid sand 1.5 miles in length by 1000ft. wide. Fresh ATV, coyote (dog?) and people tracks. White Bass and shad fingerlings

TN side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 17:01 RIVER MILE 856.5

LOCALITY: Pemiscot MO SITE NAME: Chute of Island #14
County/Parish State

WHERE SITED: Latitude: 36.2491
Longitude: 89.5712

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 202
Juveniles: _____
Eggs: _____
Nests: 18
Chicks: No

SUBSTRATE:

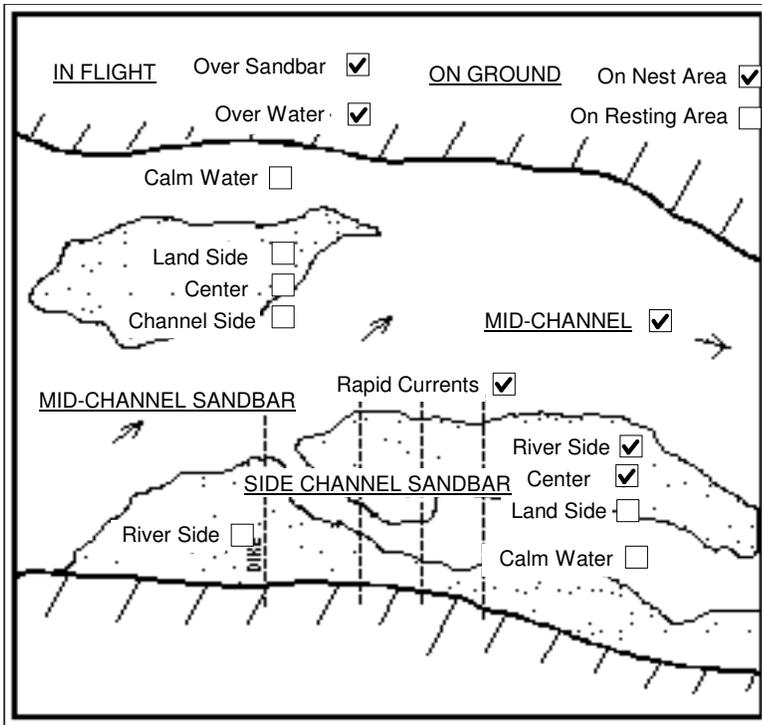
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: N 5 mph
% Cloud: 10%



OTHER NOTES:

Right Bank. Unattached, medium-size sand bar, no tracks or other disturbance. Most birds resting at waterline but 18 sitting inland on scrapes.

MO side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 17:30 RIVER MILE 846.3

LOCALITY: Lake TN SITE NAME: Opp. Caruthersville Dikes
County/Parish State

WHERE SITED: Latitude: 36.19892
Longitude: 89.64358

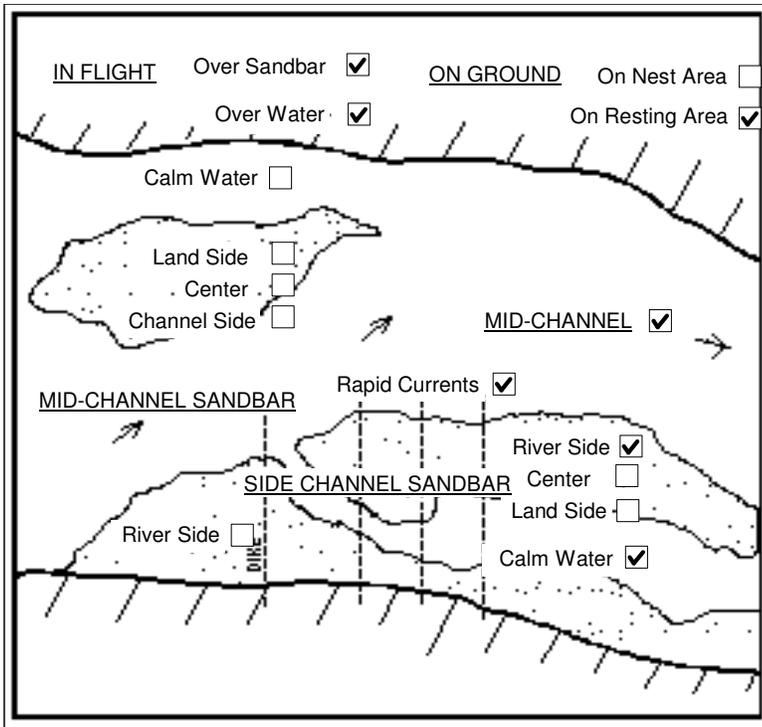
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 25
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows/Cottonwoods
Distance: _____ Feet

FIELD CONDITION:
Temperature: 90 °F
Rain: No
Wind: N 5 mph
% Cloud: 10 %



OTHER NOTES:

Left Bank. Very small (2-3 acres) attached bar to Blaker Towhead with birds at waterline only. No signs of disturbance.

TN side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/26/2008 TIME OF DAY: 17:55 RIVER MILE 836.0

LOCALITY: Dyer TN SITE NAME: Island #18 Towhead Dikes
County/Parish State

WHERE SITED: Latitude: 36.10308
Longitude: 89.63945

Approximate Distance to Water: 180 Feet

NUMBERS SIGHTED:

Adults: 188
Juveniles: _____
Eggs: _____
Nests: 9
Chicks: Yes

SUBSTRATE:

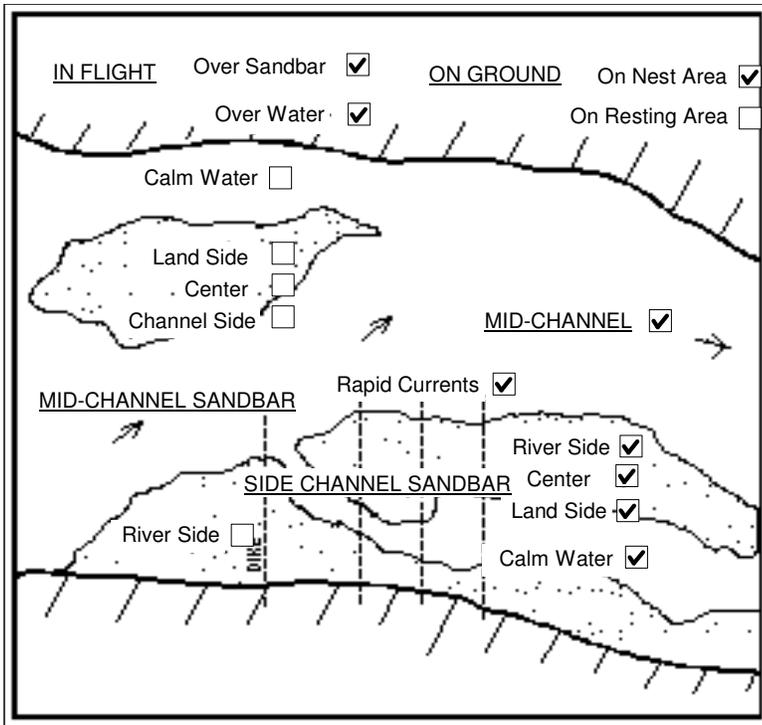
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: calm
% Cloud: 10%



OTHER NOTES:

Left Bank. Long, narrow (200ft.) attached sand bar to Towhead of Island #18. Colony on upstream point. No tracks or disturbance noted. Two fledglings and 3 Black Terns observed.

TN side

OBSERVERS: R. Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.2 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 9:54 RIVER MILE 830.0

LOCALITY: Dyer TN SITE NAME: Island #20 Dikes
County/Parish State

WHERE SITED: Latitude: 36.0372
Longitude: 89.6944

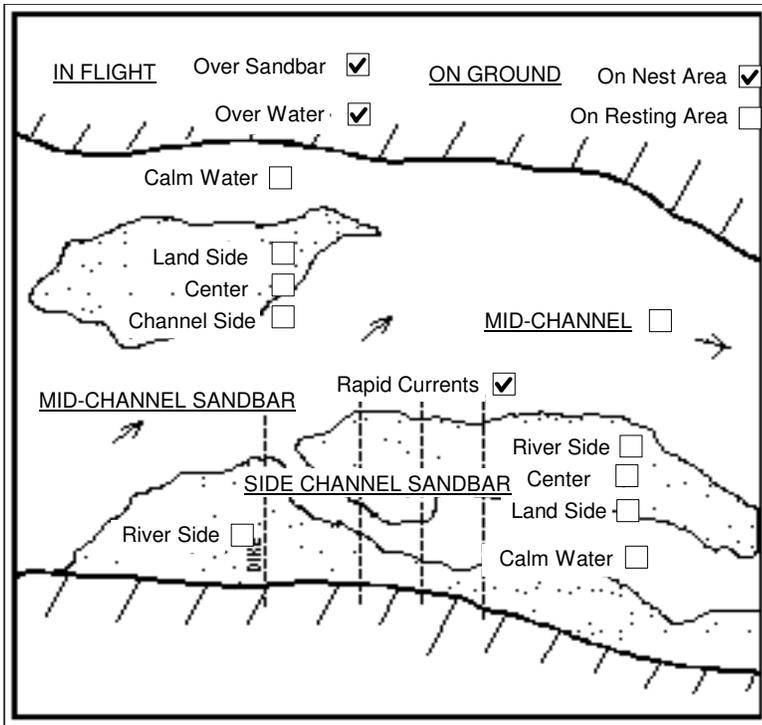
Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:
Adults: 131
Juveniles:
Eggs: 1(1) 10(2) 1(3)
Nests: 12
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type:
Distance: Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: NE 5 mph
% Cloud: 90%



OTHER NOTES:

Right Bank. Small, undulating, dikefield bar 1/4 mile x 600ft., with lignite and drift debris. No tracks or disturbance. One Bald Eagle, Spotted Sandpipers, Prothanatory Warblers and Indigo Buntings observed at Everett Lake.

MO side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 10:14 RIVER MILE 827.0

LOCALITY: Dyer TN SITE NAME: Head of Island #21 Dikes
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 29
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

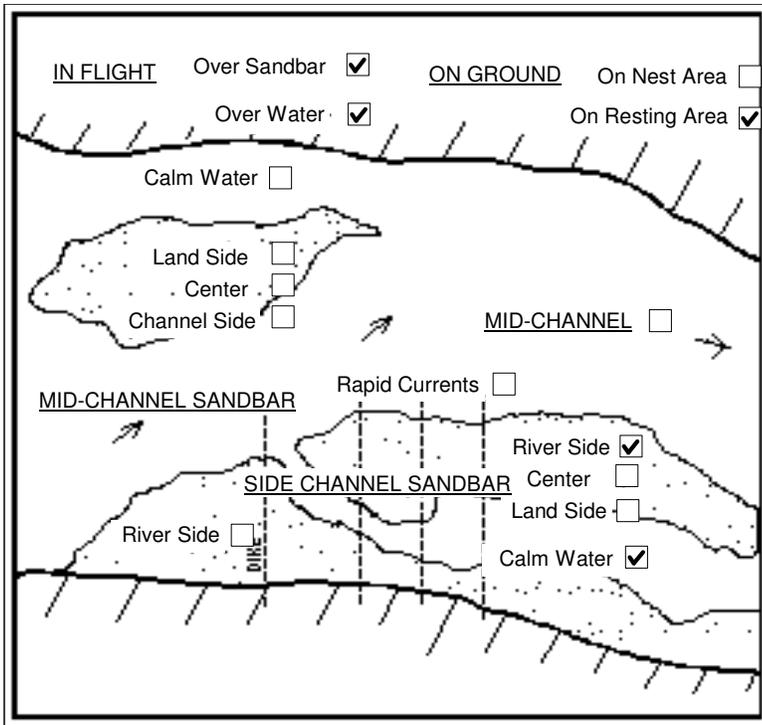
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: NE 5 mph
% Cloud: 90%



OTHER NOTES:

Left Bank. Attached sand bar to Island #21. Resting bar only.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 10:36 RIVER MILE 825.6

LOCALITY: Dyer TN SITE NAME: Island #21
County/Parish State

WHERE SITED: Latitude: 35.9629
Longitude: 89.7103

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 51
Juveniles: _____
Eggs: 1(1) 4(2) 1(3)
Nests: 6
Chicks: No

SUBSTRATE:

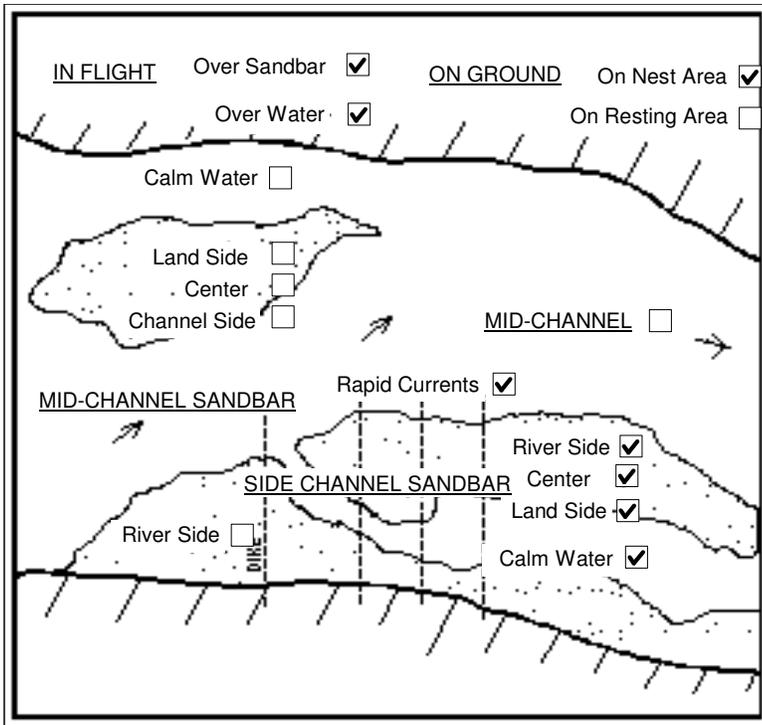
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows/Cottonwoods/gr
Distance: 50 Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: NE 5 mph
% Cloud: 90%



OTHER NOTES:

Left Bank. High, unattached, sandbar (400 x 1200ft.) with much debris. No tracks or disturbance noted.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 11:23 RIVER MILE 819.0

LOCALITY: Mississippi AR SITE NAME: Wrights Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.9094
Longitude: 89.6346

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 96
Juveniles: _____
Eggs: 1(3)
Nests: 1
Chicks: No

SUBSTRATE:

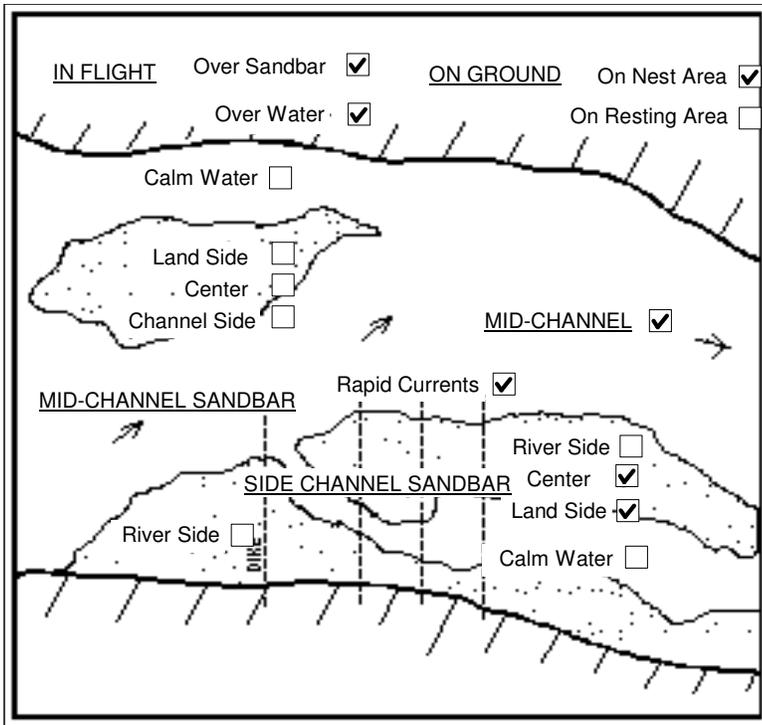
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100%



OTHER NOTES:

Right Bank. Large sand bar attached to upstream pt. of wooded island. Coyote tracks and signs of egg predation. Fishermen in boat at the waterline.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 11:35 RIVER MILE 811.5

LOCALITY: Lauderdale TN SITE NAME: Below Tamm Bend Dikes
County/Parish State

WHERE SITED: Latitude: 35.90696
Longitude: 89.74520

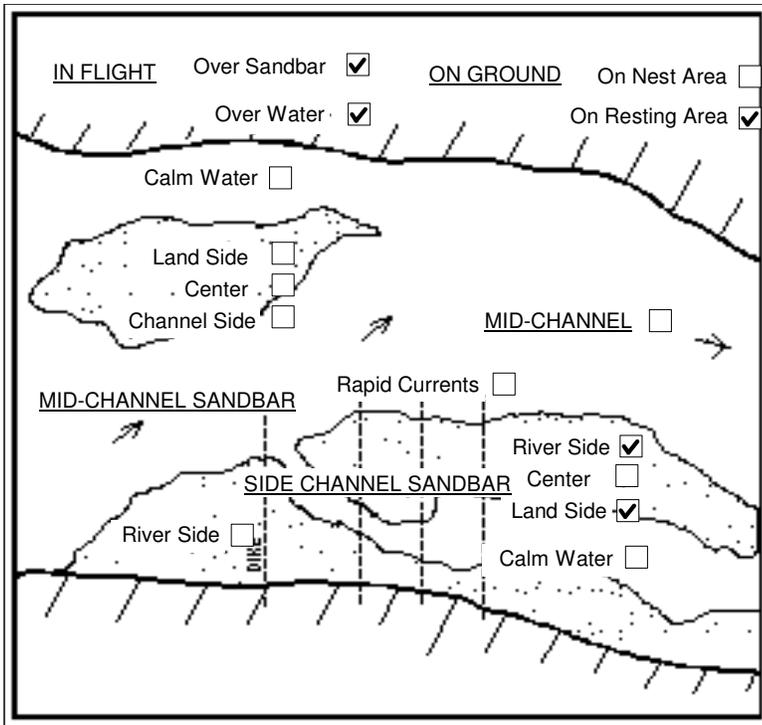
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 39
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 86 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100%



OTHER NOTES:

Left Bank. Large, attached sand bar. Birds resting at water line or fishing mid-channel. No disturbance noted.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 11:44 RIVER MILE 807.3

LOCALITY: Lauderdale TN SITE NAME: Nebraska Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.8600
Longitude: 89.7606

Approximate Distance to Water: 600 Feet

NUMBERS SIGHTED:

Adults: 337
Juveniles: _____
Eggs: 6(1) 4(2) 3(3)
Nests: 20
Chicks: No

SUBSTRATE:

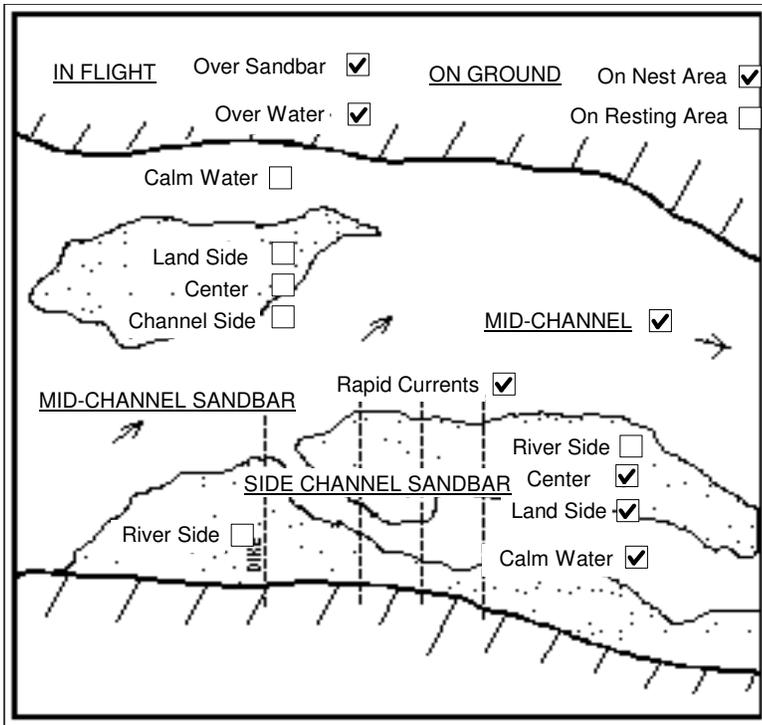
Sand:
Gravel:
Debris:

VEGETATION:

Type: Cottonwood/willows
Distance: 60 Feet

FIELD CONDITION:

Temperature: 87 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100%



OTHER NOTES:

Left Bank. High (15 ft.) long, broad bar of soft sand. Birds fishing back chute and opposite bank
revetment. No signs of disturbance.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 12:42 RIVER MILE 792.0

LOCALITY: Mississippi AR SITE NAME: Ashport Goldust Dikes Upper
County/Parish State

WHERE SITED: Latitude: 35.7468
Longitude: 89.8288

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 157
Juveniles: _____
Eggs: _____
Nests: 18
Chicks: No

SUBSTRATE:

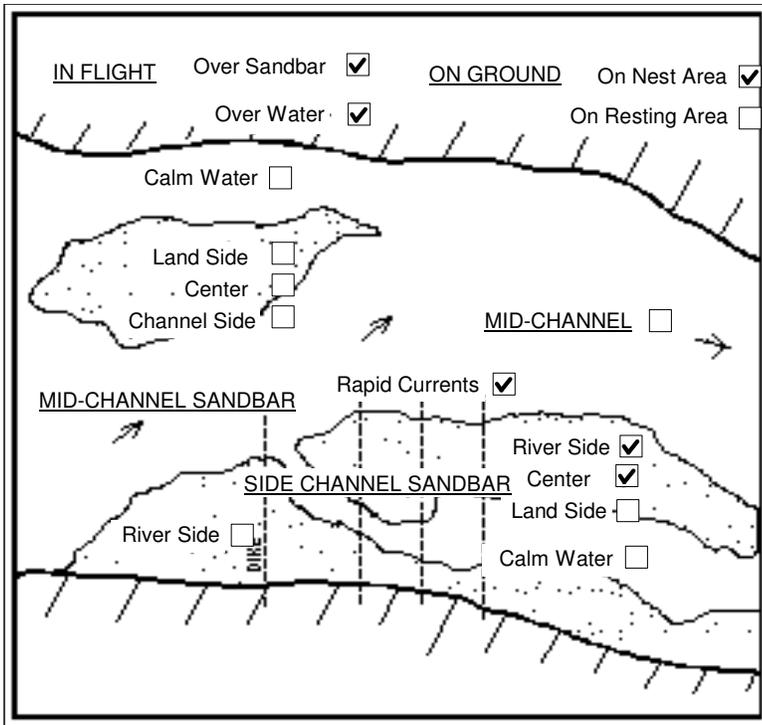
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: NE 5mph
% Cloud: 100%



OTHER NOTES:

Right Bank. Large, long, clean, barely emergent, flat sand bar between dikes. No signs of disturbance

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 13:39 RIVER MILE 787.8

LOCALITY: Lauderdale TN SITE NAME: Keyes Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.71275
Longitude: 89.9372

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 85
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

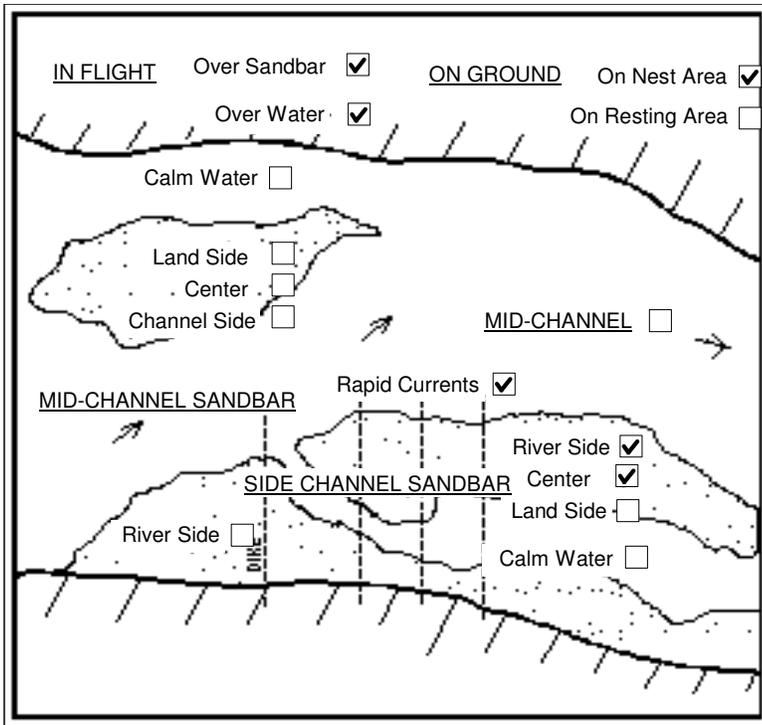
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: Yes
Wind: W 10 mph
% Cloud: 100%



OTHER NOTES:

Left Bank. Small (1/2 acre), barely emergent, unattached sand bar between dikes. Colony likely flooded due to recent river rise. No tracks or signs of disturbance. Two Black Terns observed.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 13:54 RIVER MILE 781.5

LOCALITY: Lauderdale TN SITE NAME: Below Plum Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.6527
Longitude: 89.8951

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 109
Juveniles: _____
Eggs: 5(2) 2(3)
Nests: 7
Chicks: No

SUBSTRATE:

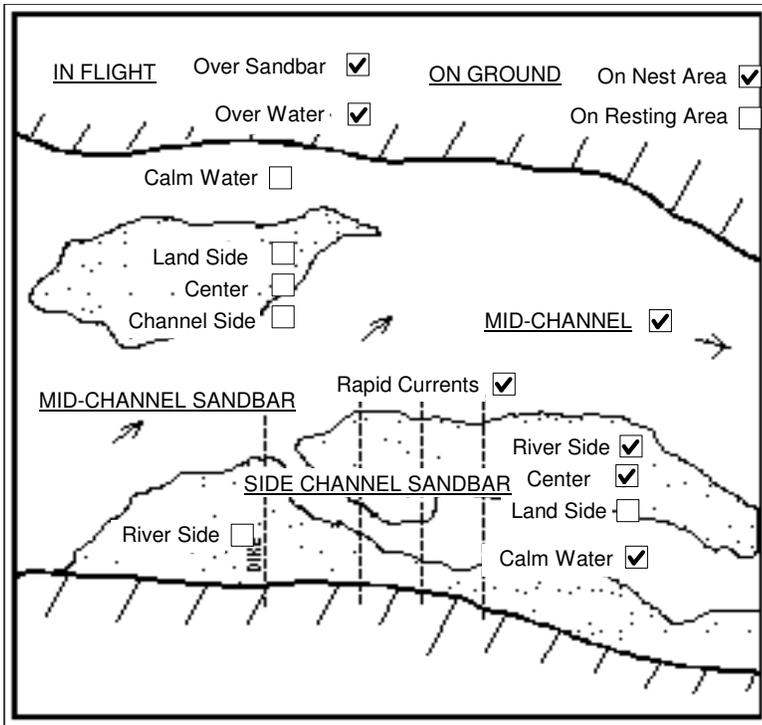
Sand:
Gravel:
Debris:

VEGETATION:

Type: Cottonwood/willows
Distance: 100 Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: W 10 mph
% Cloud: 100%



OTHER NOTES:

Left Bank. Small (2 acre), high, clean, unattached, newly-formed sand bar, probably due to newly constructed dike 600yds. Downstream. No disturbance noted.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Caruthersville = 17.3 R
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 14:20 RIVER MILE 778.0

LOCALITY: Lauderdale TN SITE NAME: Sunrise Towhead Chute
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 120
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

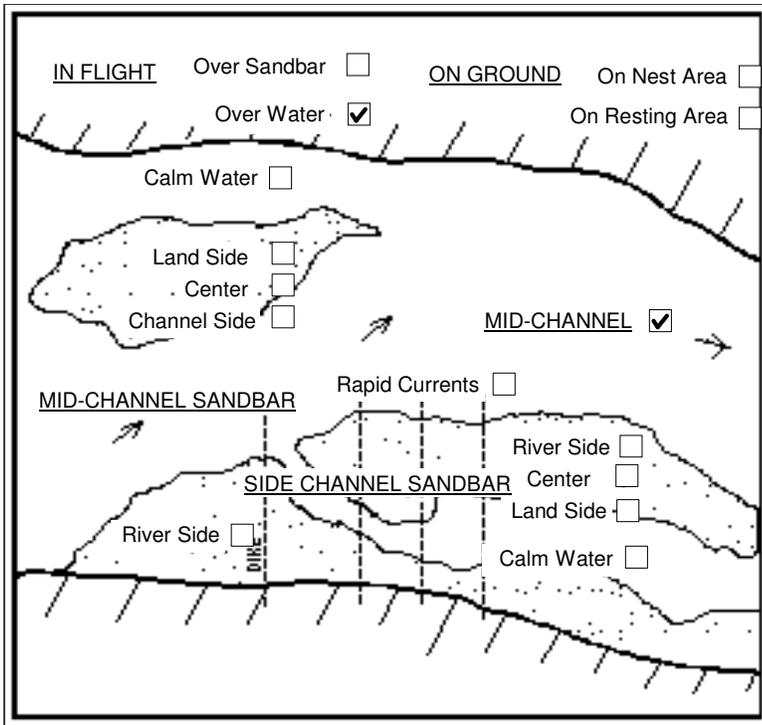
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Terns seen in transit, feeding along 3 mile stretch above Randolph Dikes.

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 14:40 RIVER MILE 771.0

LOCALITY: Tipton TN SITE NAME: Randolph Dikes
County/Parish State

WHERE SITED: Latitude: 35.5259
Longitude: 89.8987

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 478
Juveniles: _____
Eggs: 1(2) 2(3)
Nests: 20
Chicks: No

SUBSTRATE:

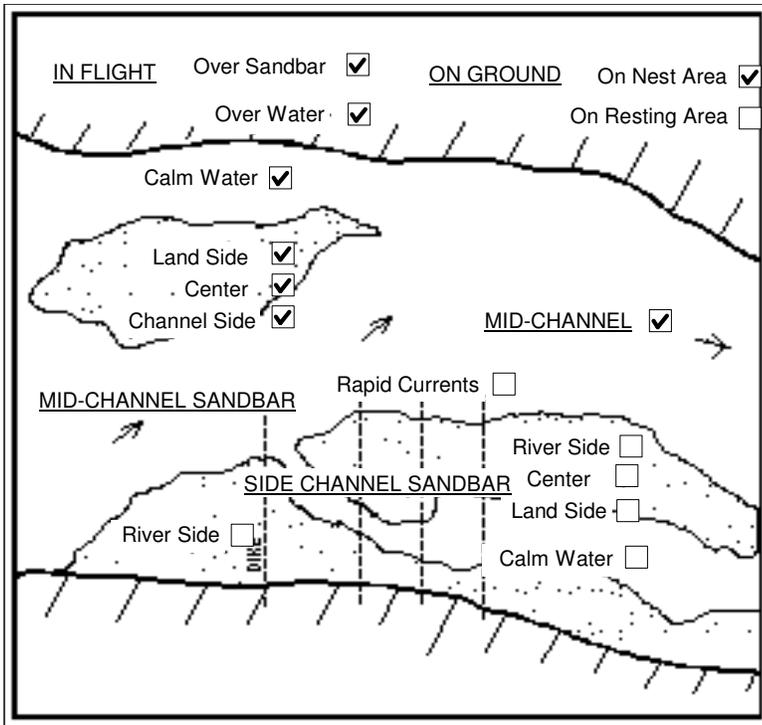
Sand:
Gravel:
Debris:

VEGETATION:

Type: Grass
Distance: 50 Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Left Bank. Large, high, spoil bar 15 ft. in elevation, with gravel and mudstone accretions along trailer dike. Colony massive, with humans and dogs camping also.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 15:01 RIVER MILE 766.5

LOCALITY: Tipton TN COUNTY/PARISH STATE SITE NAME: Below Richardson Landing Dikes Upper

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 1
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

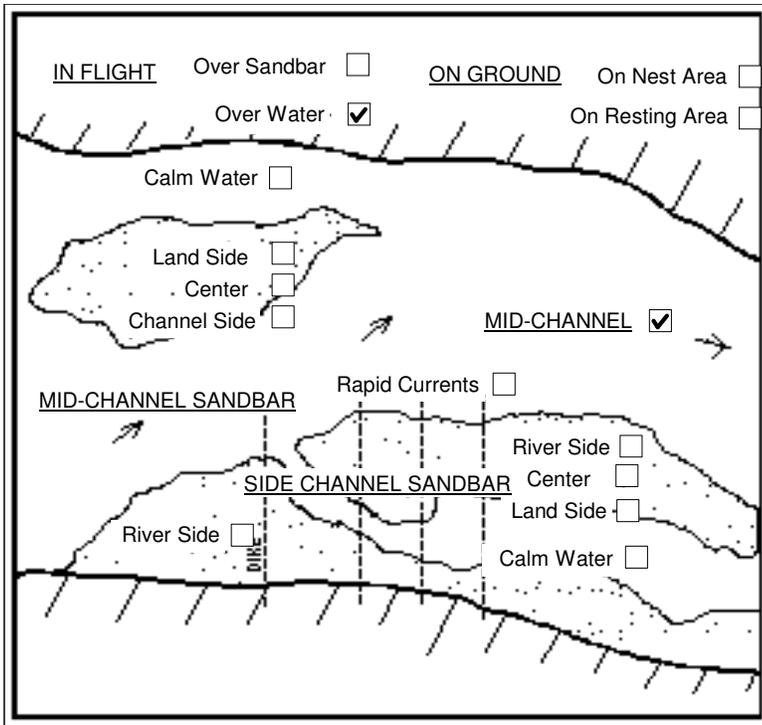
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

One tern in transit mid-channel.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 15:08 RIVER MILE 763.0

LOCALITY: Tipton TN SITE NAME: below Richardson Landing Dikes Lower
County/Parish State

WHERE SITED: Latitude: 35.506
Longitude: 90.0076

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 54
Juveniles: _____
Eggs: _____
Nests: 4
Chicks: No

SUBSTRATE:

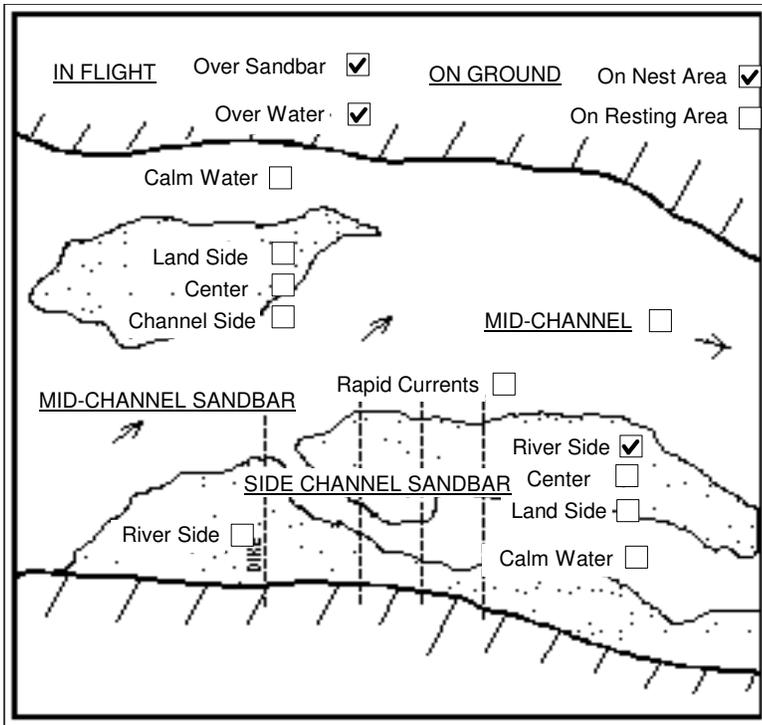
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Left Bank. Small, clean, unattached, flat point bar. No signs of disturbance.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 15:35 RIVER MILE 760.5

LOCALITY: Tipton TN SITE NAME: Cedar Point
County/Parish State

WHERE SITED: Latitude: 35.4355
Longitude: 90.0018

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 140
Juveniles: _____
Eggs: 2(2) 2(3)
Nests: 4
Chicks: Yes

SUBSTRATE:

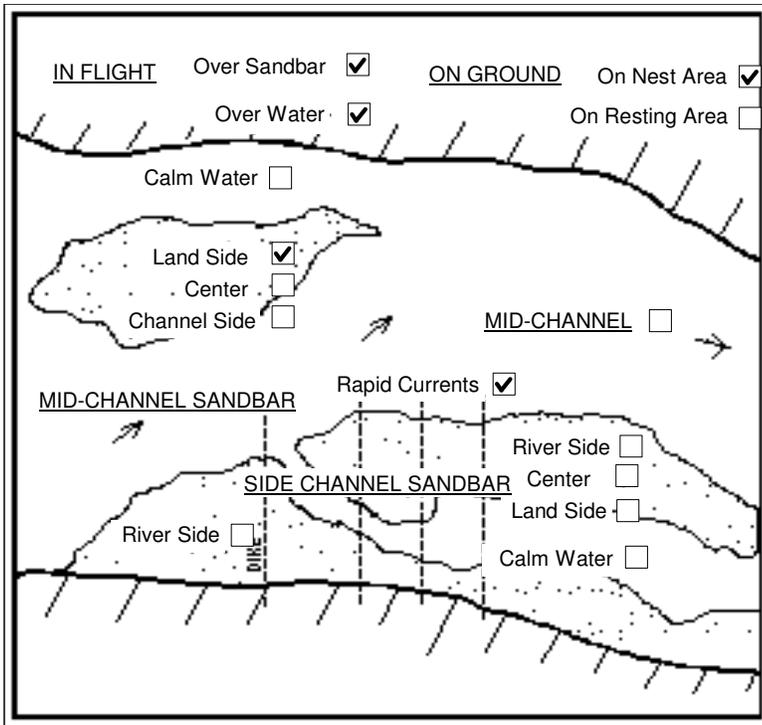
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 100 Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Right Bank. Long, broad, large, attached at least to wooded island with large back chute. Perimeter count yields 4 nests, but many chicks observed up to 1 wk. old. No signs of disturbance. One Small Mouth Buffalo fingerling.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 15:55 RIVER MILE 757.5

LOCALITY: Tipton TN COUNTY/PARISH STATE SITE NAME: Densford Dikes

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 18
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

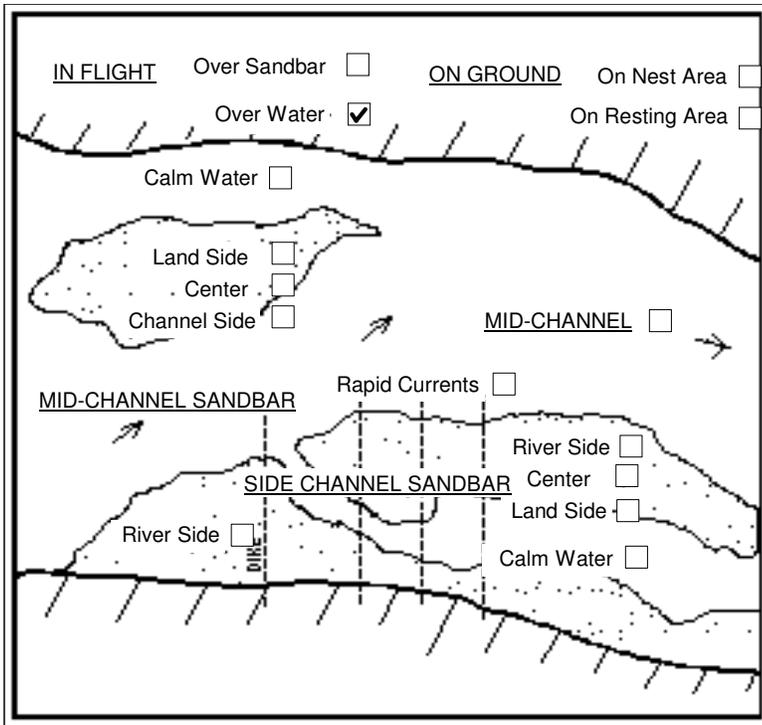
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Left Bank. Terns fishing above dikes and along revetment.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 16:02 RIVER MILE 755.0

LOCALITY: Shelby TN COUNTY/PARISH STATE SITE NAME: Densford Bar

WHERE SITED: Latitude: 35.3902
Longitude: 90.0703

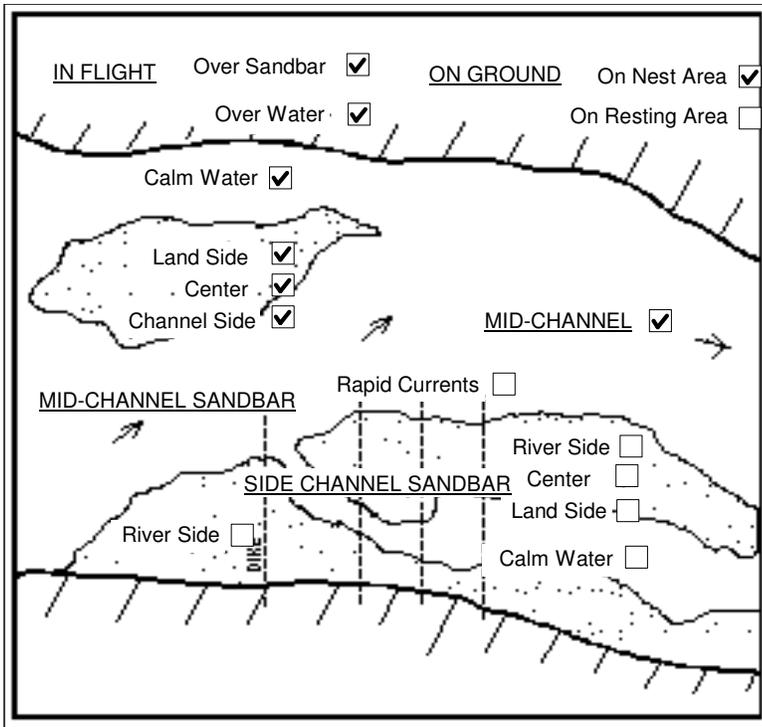
Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:
Adults: 75
Juveniles: _____
Eggs: _____
Nests: 8
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows/Cottonwoods
Distance: 1000 Feet

FIELD CONDITION:
Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Left Bank. Long, high (10 ft.) mid-channel sand bar. Most are resting at waterline, but 8 on nests inland amidst patches of gravel. Much courtship and feeding. Eight humans in ATVs and boats along waterline.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/27/2008 TIME OF DAY: 16:36 RIVER MILE 740.5

LOCALITY: Crittenden AR COUNTY/Parish State SITE NAME: Sycamore Chute Dikes

WHERE SITED: Latitude: 35.20767
Longitude: 90.07191

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 32
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

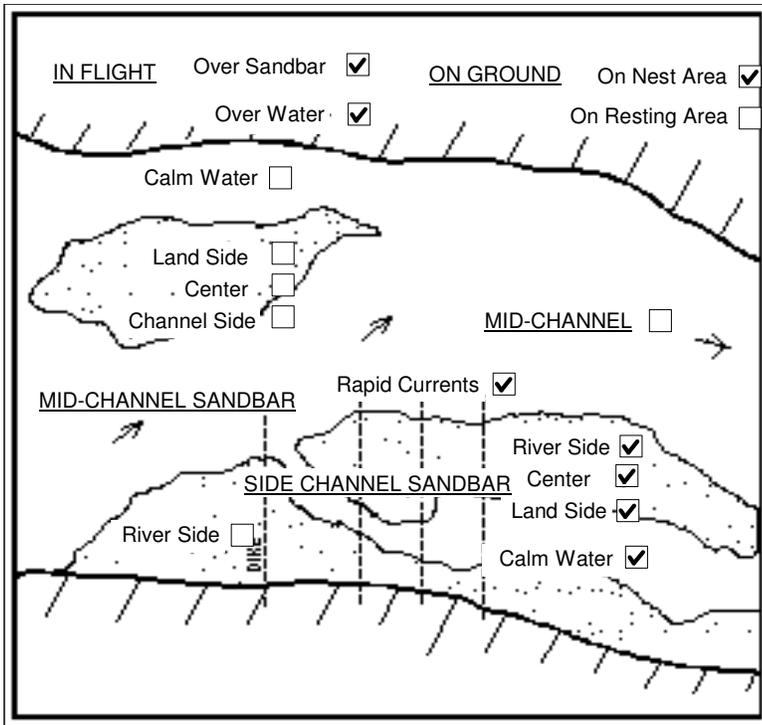
Sand:
Gravel:
Debris:

VEGETATION:

Type: Hardwoods
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 100%



OTHER NOTES:

Right Bank. Medium size gravel bar, 2 ft. in elevation with some sand and mud within dike field. Attached and undulating with scattered lignite. Twelve black-necked Stilts and 1 Mallard duck.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.4 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 9:10 RIVER MILE 733.0

LOCALITY: Crittenden AR SITE NAME: Engineer Bar Dikes
County/Parish State

WHERE SITED: Latitude: 35.12323
Longitude: 90.10361

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 18
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

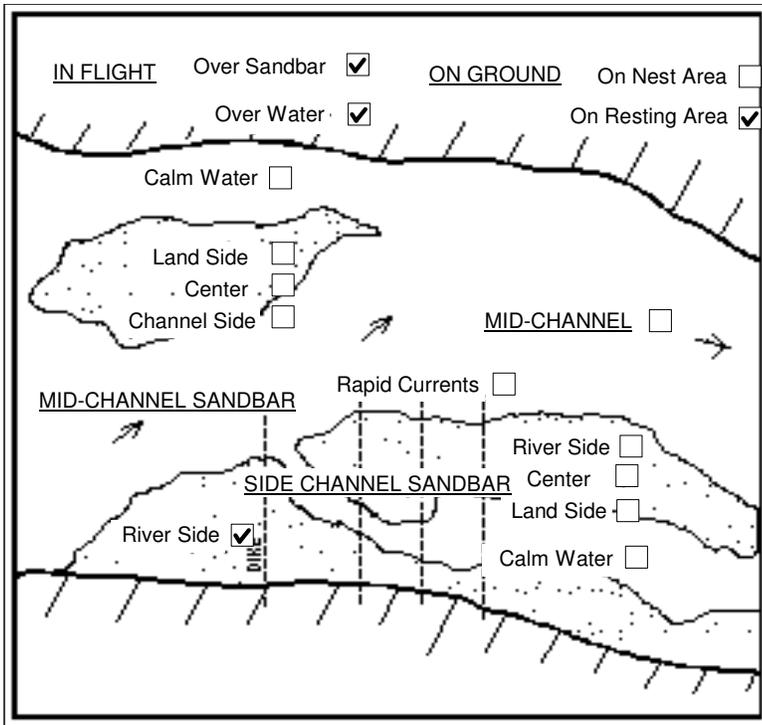
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 800 Feet

FIELD CONDITION:

Temperature: 79 °F
Rain: No
Wind: NE 3mph
% Cloud: 10



OTHER NOTES:

Right Bank. Low, flat, medium size, attached sand bar with most terns resting at waterline. Resting only.
One Cattle Egret and sand piper (sp. ?).

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 9:23 RIVER MILE 729.5

LOCALITY: Shelby TN SITE NAME: Vice Presidents Island #46
County/Parish State

WHERE SITED: Latitude: 35.1264
Longitude: 90.1594

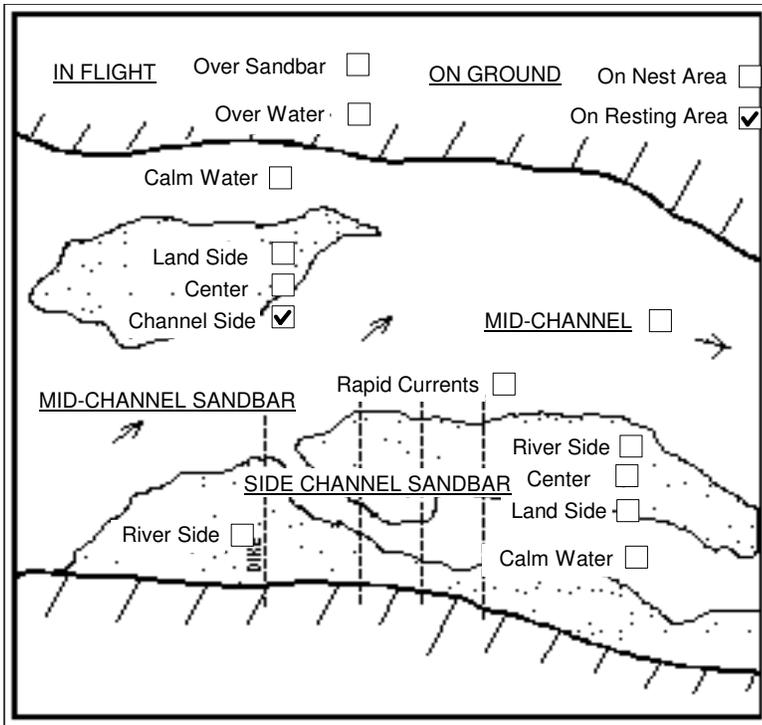
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 25
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 10



OTHER NOTES:

Left Bank. Very small, barely exposed sand bar, less than a few hundred square feet. Resting only.

TN side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 9:35 RIVER MILE 725.0

LOCALITY: Crittenden AR SITE NAME: Dismal Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.0691
Longitude: 90.1838

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 18
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

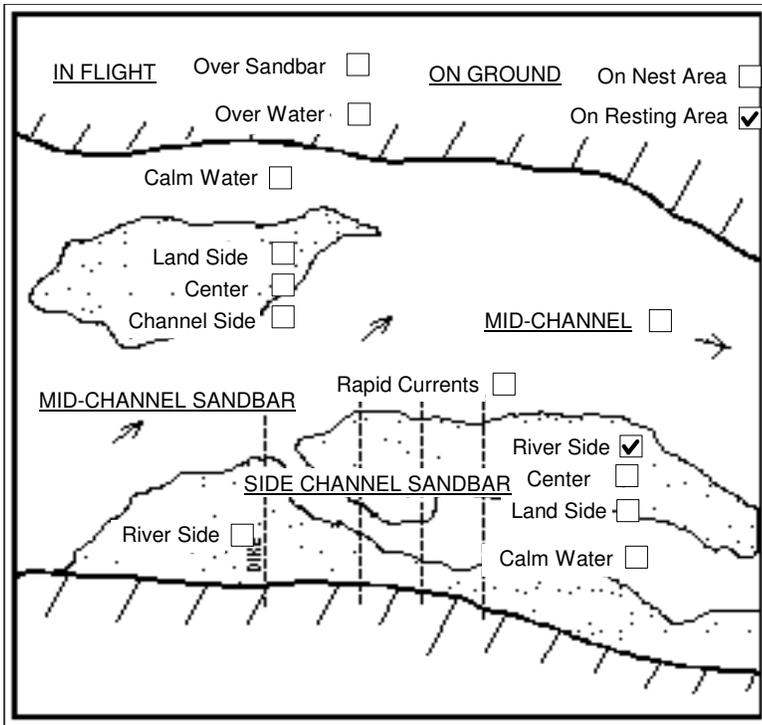
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: SW 5 mph
% Cloud: 20



OTHER NOTES:

Right Bank. Small sand bar attached to wooded island. One hundred sand pipers along water line. No signs of disturbance.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 9:59 RIVER MILE 716.0

LOCALITY: Desoto MS COUNTY/PARISH STATE SITE NAME: Cow Island Bend Upper

WHERE SITED: Latitude: 35.0074
Longitude: 90.2937

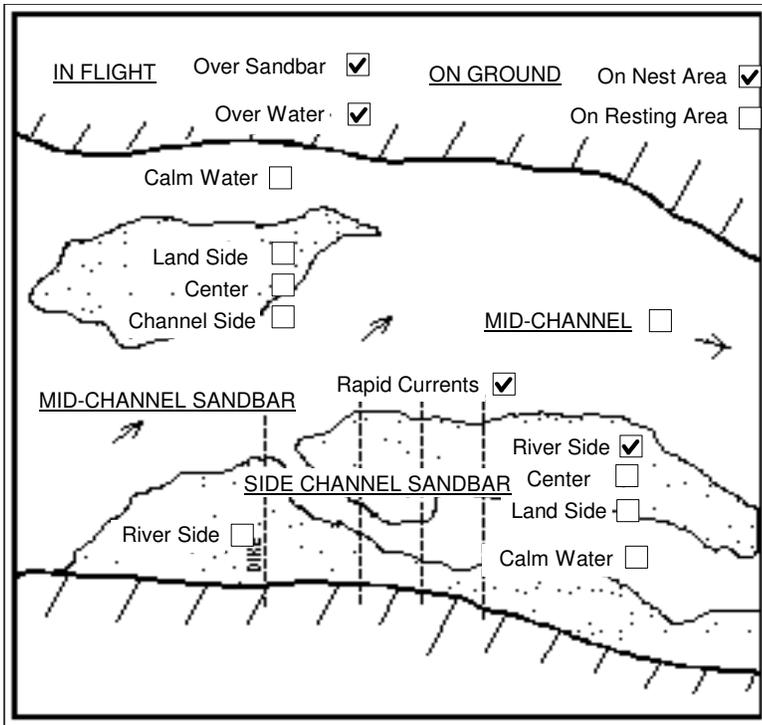
Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:
Adults: 91
Juveniles: 1
Eggs: 1(2)
Nests: 14
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 83 °F
Rain: No
Wind: SW 5 mph
% Cloud: 20



OTHER NOTES:

Left Bank. Small, flat, unattached sand bar (300 x 900 ft.) below Coahoma Dikes. Scattered lignite debris with no signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 10:17 RIVER MILE 714.5

LOCALITY: Desoto MS COUNTY/Parish State SITE NAME: Cow Island Bend Lower

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 8
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

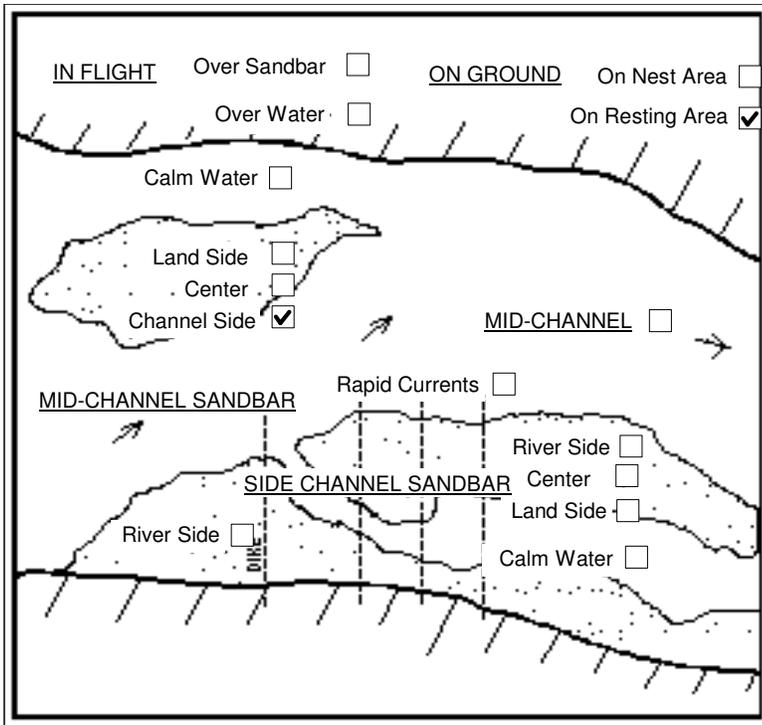
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: SW 5 mph
% Cloud: 20



OTHER NOTES:

Left Bank. Small, attached point bar (200 x 400ft.) below Cow Island Bend. Resting only.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 10:45 RIVER MILE 706.5

LOCALITY: Desoto MS COUNTY/Parish State SITE NAME: Norfolk Star Revetment

WHERE SITED: Latitude: 34.8981
Longitude: 90.2575

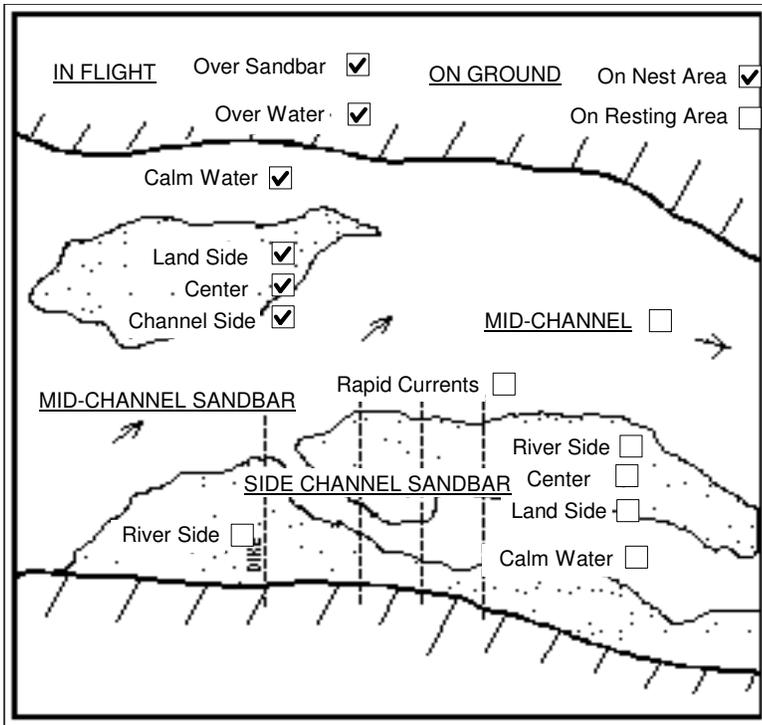
Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:
Adults: 108
Juveniles: _____
Eggs: 1(2)
Nests: 1
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 85 °F
Rain: No
Wind: SW 5 mph
% Cloud: 10



OTHER NOTES:

Left Bank. Small (700 x 400ft.), clean, newly formed mid-channel sandbar one mile below active dredging by Army Corps of Engineers MV Hurley. No signs of disturbance. One Silver Carp fingerling.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 11:14 RIVER MILE 705.0

LOCALITY: Crittenden AR SITE NAME: Seyppel Dikes
County/Parish State

WHERE SITED: Latitude: 34.8911
Longitude: 90.27175

Approximate Distance to Water: 75 Feet

NUMBERS SIGHTED:

Adults: 245
Juveniles: 20
Eggs: _____
Nests: 18
Chicks: Yes

SUBSTRATE:

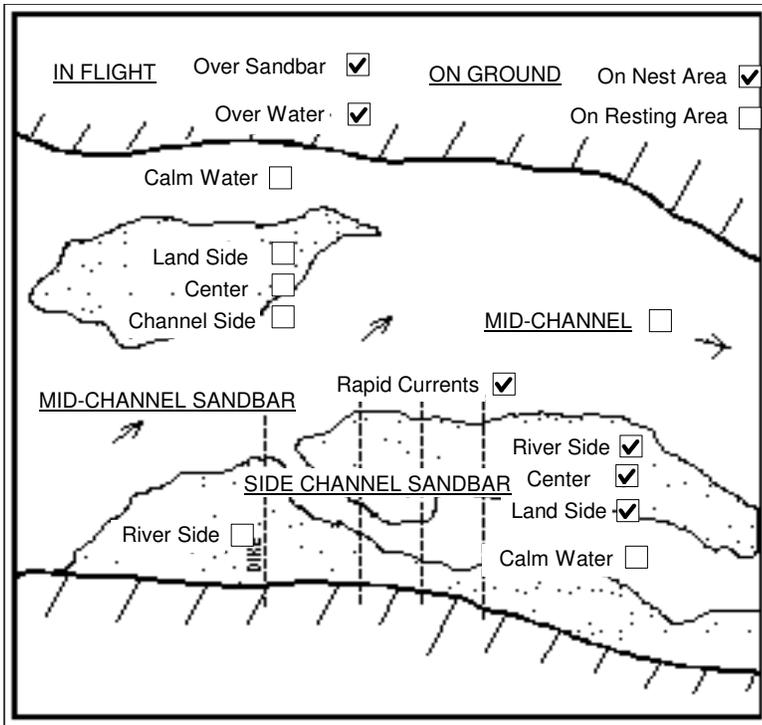
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: SW 5 mph
% Cloud: 10



OTHER NOTES:

Right Bank. Long, low, flat sand bar (600ft. X 1 mile long) with birds sitting along high center of bar. No disturbance noted.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 11:25 RIVER MILE 704.4

LOCALITY: Crittenden AR SITE NAME: Pickett Dikes
County/Parish State

WHERE SITED: Latitude: 34.8757
Longitude: 90.3050

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 107
Juveniles: _____
Eggs: _____
Nests: 3
Chicks: No

SUBSTRATE:

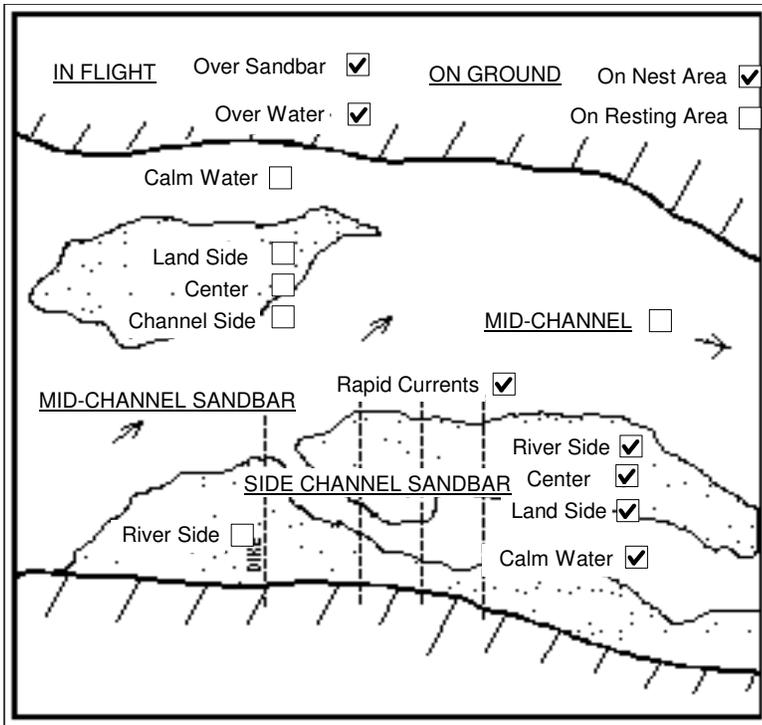
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: SW 5 mph
% Cloud: 10



OTHER NOTES:

Left Bank. Unattached, long sand bar (3/4 mile x 300ft.) between dikes. Fifteen Canada Geese on periphery.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 11:40 RIVER MILE 700.5

LOCALITY: Crittenden AR SITE NAME: Porter Lake Dikes
County/Parish State

WHERE SITED: Latitude: 34.84330
Longitude: 90.36764

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 16
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

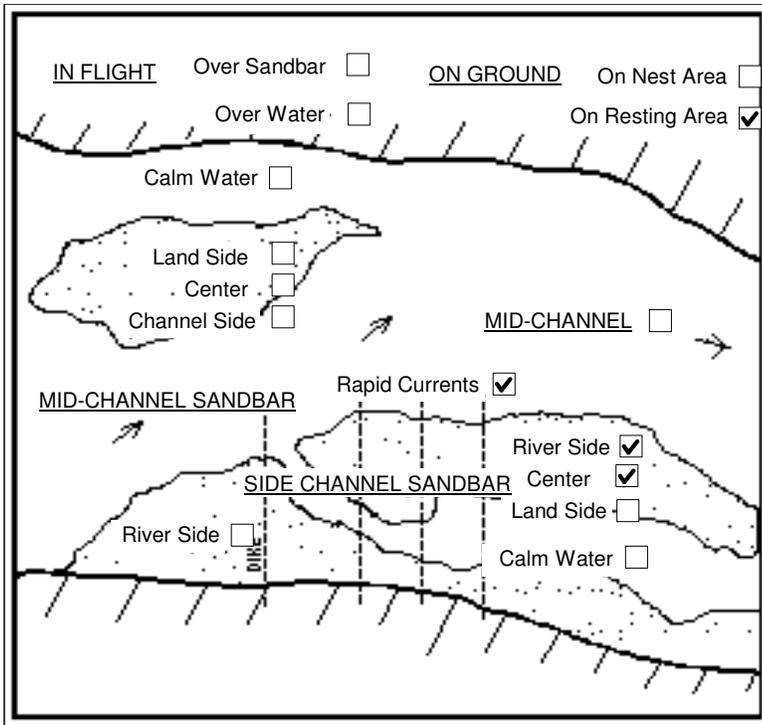
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: SW 5 mph
% Cloud: 10



OTHER NOTES:

Right Bank. Small sand bar, barely exposed, birds resting only.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 11:53 RIVER MILE 698.5

LOCALITY: Crittenden AR SITE NAME: Basket Bar Dikes Upper
County/Parish State

WHERE SITED: Latitude: 34.8391
Longitude: 90.3786

Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:

Adults: 380
Juveniles: 3
Eggs: 10(2)
Nests: 10
Chicks: Yes

SUBSTRATE:

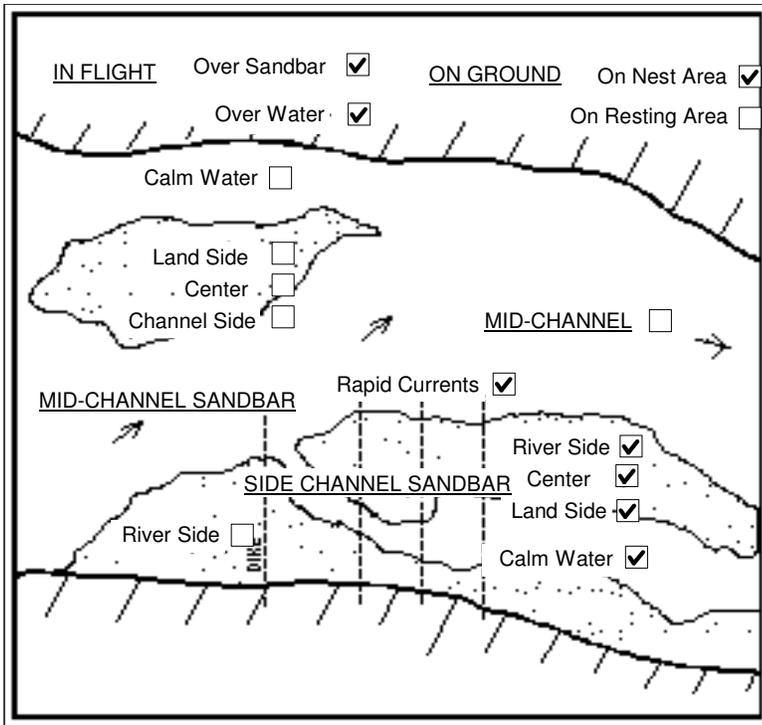
Sand:
Gravel:
Debris:

VEGETATION:

Type: Cottonwoods
Distance: 50 Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: SW 5 mph
% Cloud: 10



OTHER NOTES:

Right Bank. Long, low sand bar (1 x 1/2 mile) attached at upper end. Nests along wrack lines in coarse sand with scattered 10ft. Cottonwoods. Many abandoned eggs and chicks, one week old to fledglings. Gizzard Shad and Drum fingerlings. No signs of disturbance.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Memphis = 10.6 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 12:15 RIVER MILE 697

LOCALITY: _____ STATE: _____
County/Parish State

SITE NAME: Basket Bar Dikes Lower

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 20
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

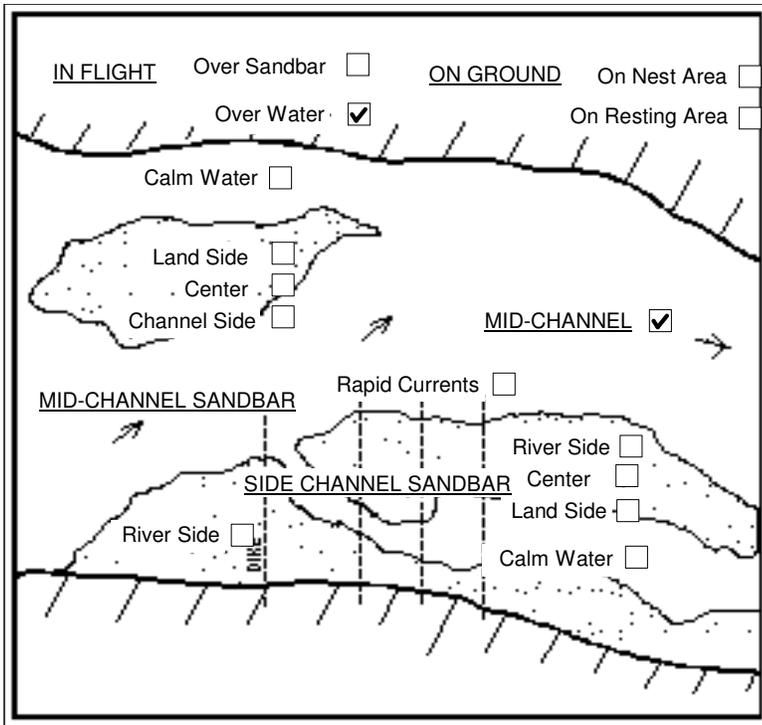
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: 0 Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: SW 5 mph
% Cloud: 10



OTHER NOTES:

Twenty terns feeding mid-channel.

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: _____ = _____
Memphis (Gage Location) 10.6 R (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 13:39 RIVER MILE 693.5

LOCALITY: Tunica MS SITE NAME: Commerce Dikes
County/Parish State

WHERE SITED: Latitude: 34.81545
Longitude: 90.4572

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 109
Juveniles: _____
Eggs: _____
Nests: 1
Chicks: No

SUBSTRATE:

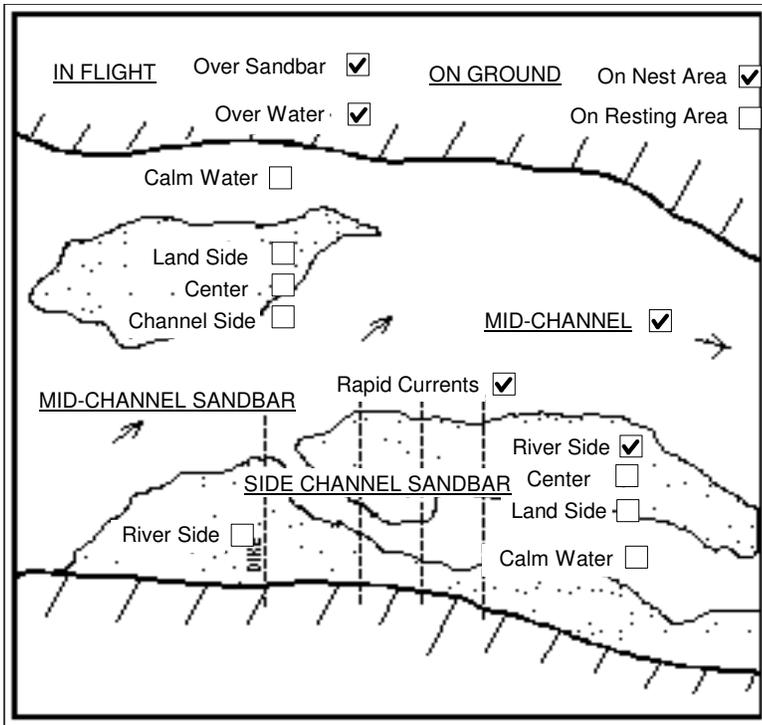
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Large, attached point bar with most birds at waterline, but one observe sitting inland. Ten terns fishing mid-channel and Coyote tracks present.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Helena = 16.8 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 14:04 RIVER MILE 687.0

LOCALITY: Lee AR SITE NAME: Mhoon Bend
County/Parish State

WHERE SITED: Latitude: 34.73875
Longitude: 90.45414

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 226
Juveniles: _____
Eggs: _____
Nests: 7
Chicks: No

SUBSTRATE:

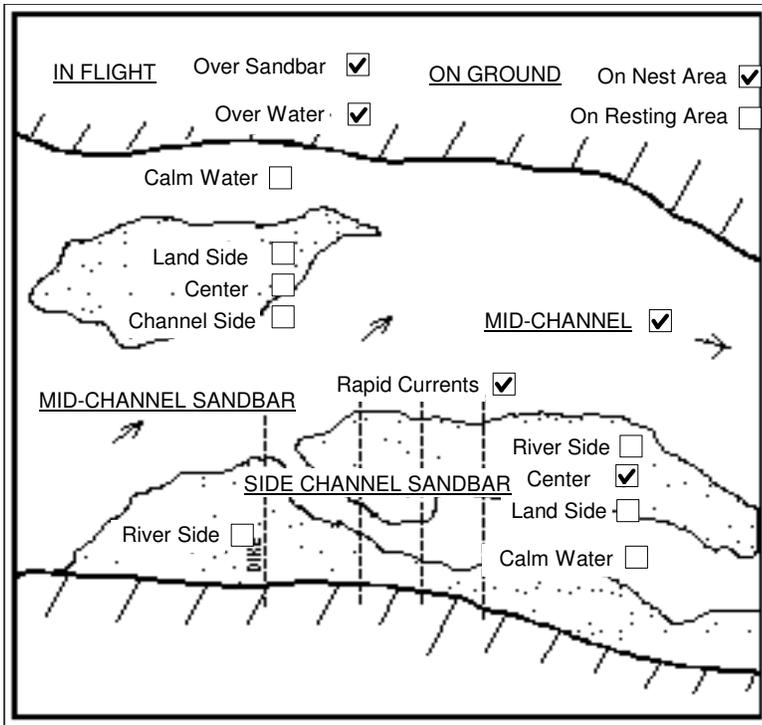
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: calm
% Cloud: 20



OTHER NOTES:

Right Bank. Another very large (3 miles) attached, undulating, sand and gravel bar with large stand of willows at center. Perimeter count with colony dispersed widely across the high center.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Helena = 16.8 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 14:30 RIVER MILE 680.0

LOCALITY: Tunica MS SITE NAME: Bordeaux Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.73383
Longitude: 90.56013

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 155
Juveniles: 10
Eggs: _____
Nests: 8
Chicks: Yes

SUBSTRATE:

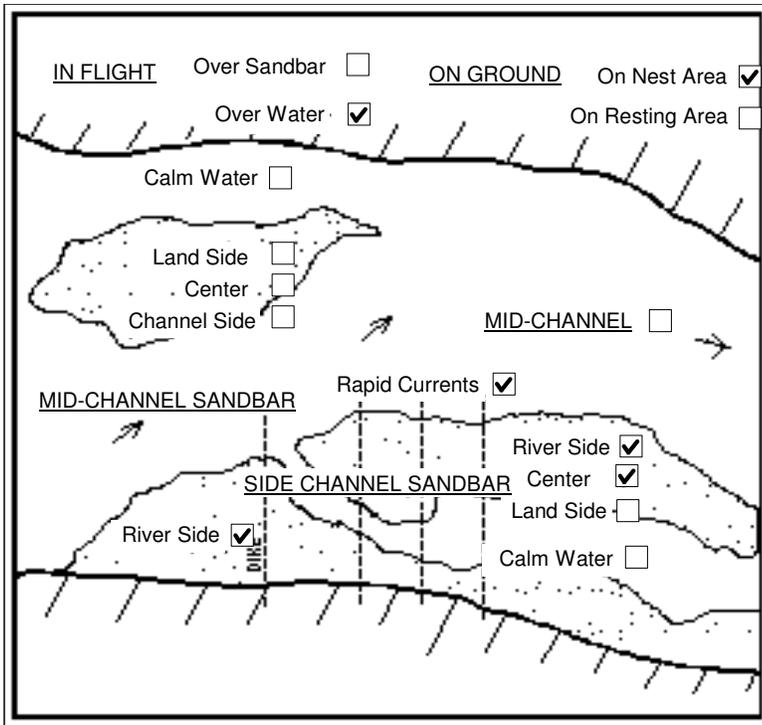
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Large, sloping, attached point bar of sand, gravel and mud. Many juveniles observed with 8 sitting inland on nests. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Helena = 16.8 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 14:44 RIVER MILE 676.5

LOCALITY: Lee AR SITE NAME: Below Walnut Bend Dikes
County/Parish State

WHERE SITED: Latitude: 34.6753
Longitude: 90.5742

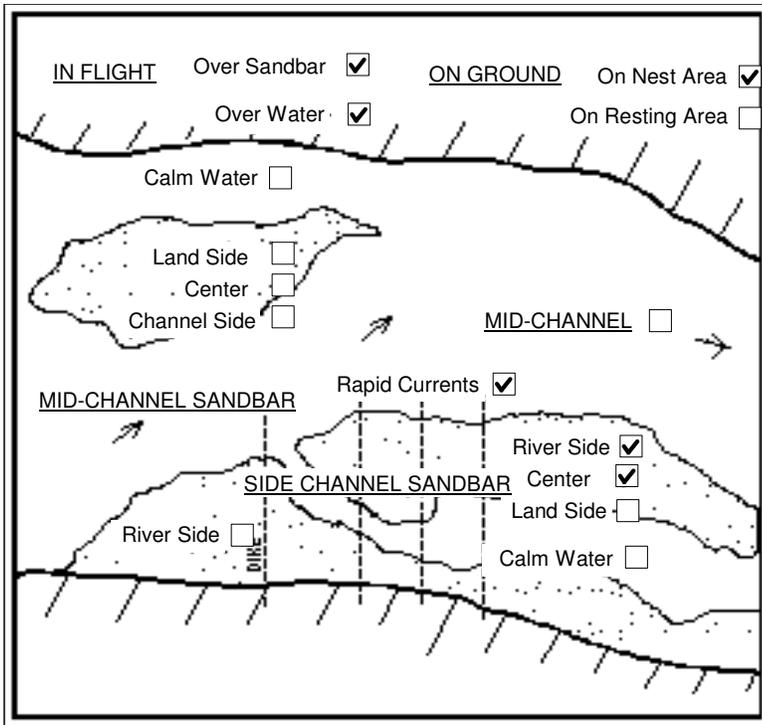
Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:
Adults: 104
Juveniles: _____
Eggs: _____
Nests: 2
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 92 °F
Rain: No
Wind: SW 5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Gently sloping, attached sand bar with patches of gravel. Most birds resting at waterline, two sitting inland. No apparent disturbance or tracks.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Helena = 16.8 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 15:00 RIVER MILE 672.5

LOCALITY: Tunica MS SITE NAME: St. Francis Bend
County/Parish State

WHERE SITED: Latitude: 34.6340
Longitude: 90.5832

Approximate Distance to Water: 80 Feet

NUMBERS SIGHTED:

Adults: 520
Juveniles: _____
Eggs: 3(1) 18(2) 11(3)
Nests: 110
Chicks: Yes

SUBSTRATE:

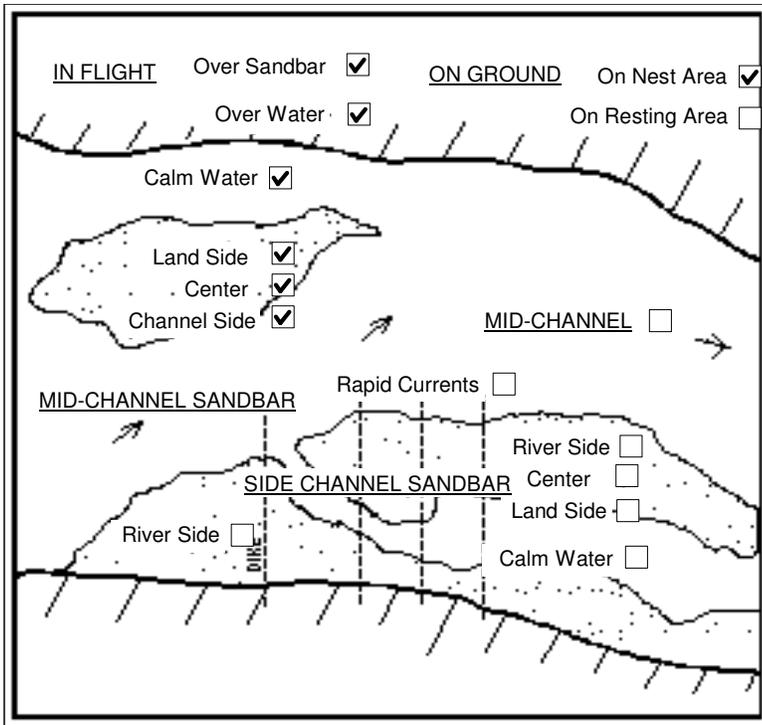
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 92 °F
Rain: No
Wind: SW 5 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Very large, flat, high, unattached, clean sand bar. Colony at least 3 miles long by 1/2 mile wide, with nests widely scattered. Drift count yields 110 sitting on nests. Chicks present 2 to 7 days old. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Helena = 16.8 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/28/2008 TIME OF DAY: 15:36 RIVER MILE 667.5

LOCALITY: Phillips AR SITE NAME: Prairie Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.5625
Longitude: 90.5536

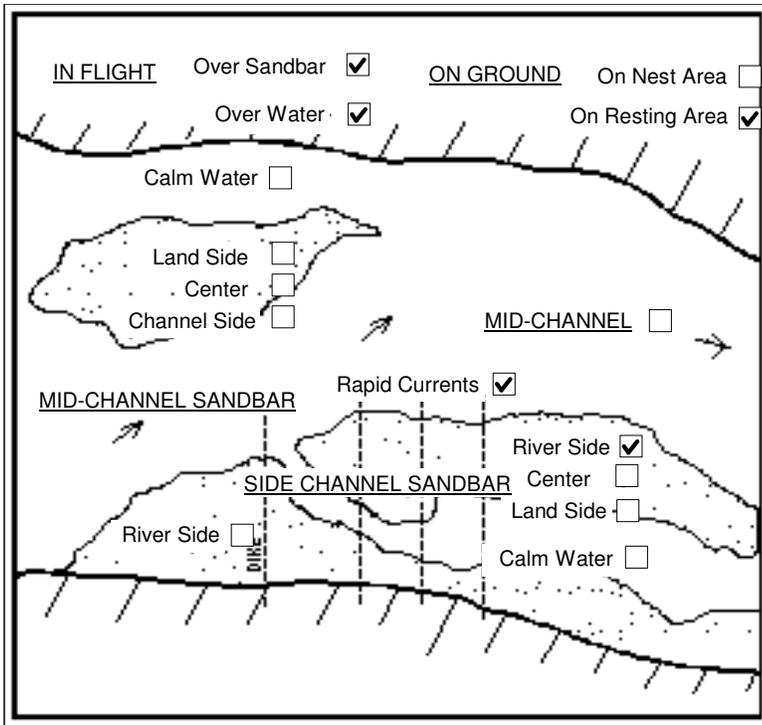
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 144
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 90 °F
Rain: No
Wind: SW 5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Large, high, undulating, gravel bar attached to heavily wooded island. Terns resting at waterline.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Helena = 16.8 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 8:50 RIVER MILE 661.5

LOCALITY: Coahoma MS SITE NAME: Helena Reach
County/Parish State

WHERE SITED: Latitude: 34.4602
Longitude: 90.5827

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 47
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

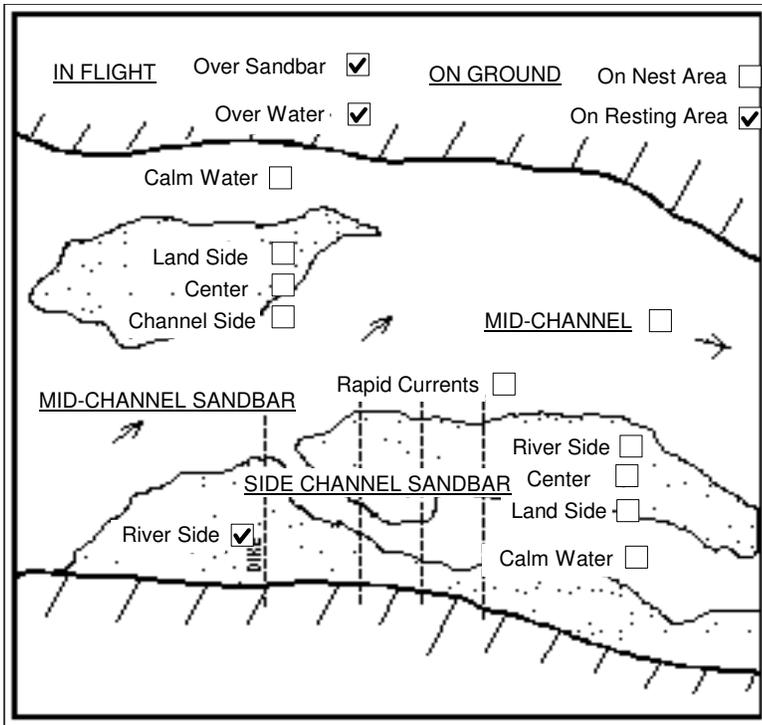
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: N 5 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Attached sand bar of clean, solid sand. No visible tracks or disturbance. Most resting at waterline with no breeding activity noted. Four Canada Geese present.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 9:03 RIVER MILE 656.0

LOCALITY: Phillips AR SITE NAME: Montezuma Towhead Dikes
County/Parish State

WHERE SITED: Latitude: 34.4097
Longitude: 90.5917

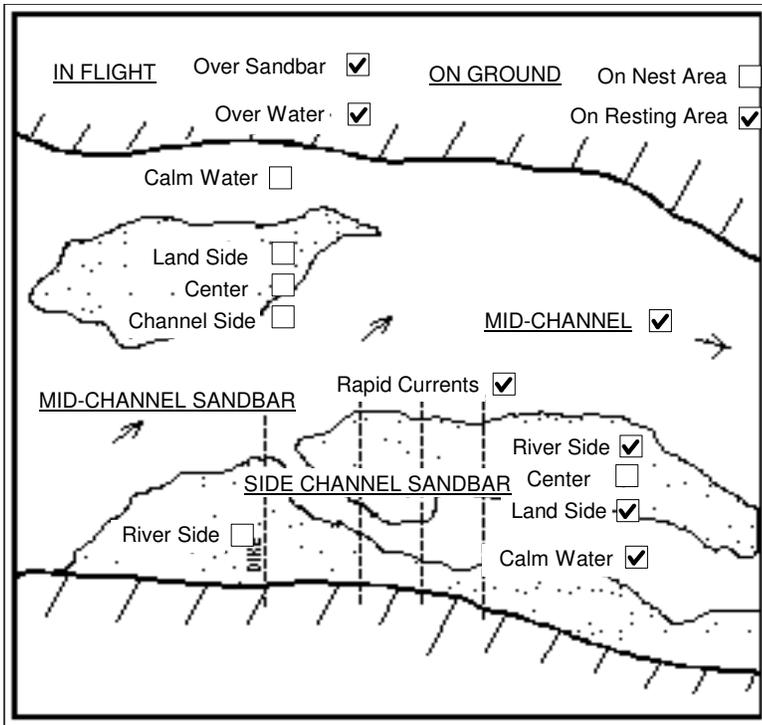
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 47
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: N 3-5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Attached medium size sand bar with patches of gravel. No nests observed but also present were Great Egrets, hundreds of Rough Winged Swallows, 228 Canada Geese and 1 immature Forster's Tern.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 9:18 RIVER MILE 651.2

LOCALITY: Coahoma MS SITE NAME: Friars Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.3757
Longitude: 90.6618

Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:

Adults: 91
Juveniles: _____
Eggs: _____
Nests: 6
Chicks: No

SUBSTRATE:

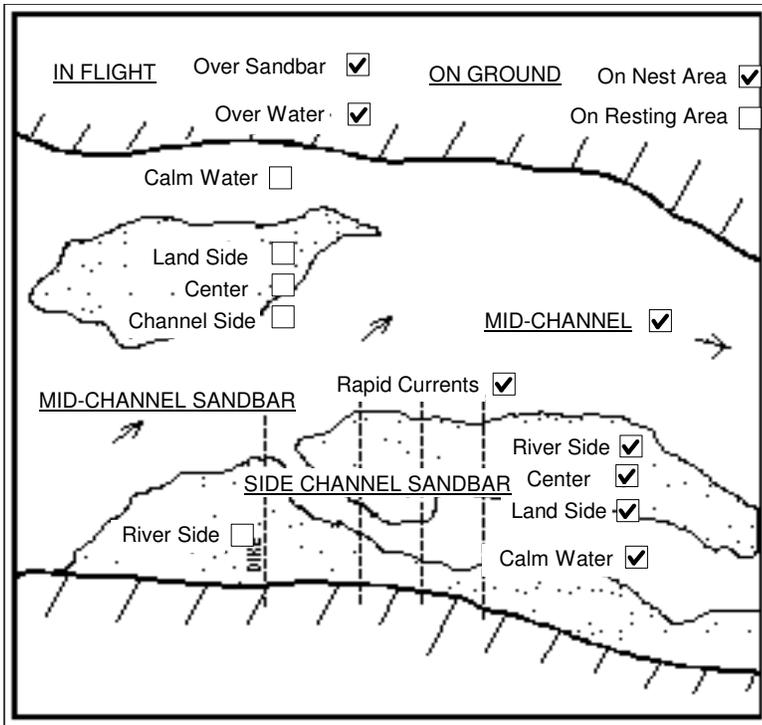
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: N 5 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Clean, small (1.5 acre), low, flat, unattached sand bar. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 9:27 RIVER MILE 648.5

LOCALITY: Phillips AR SITE NAME: Kangaroo Point Dikes Upper
County/Parish State

WHERE SITED: Latitude: 34.3671
Longitude: 90.7004

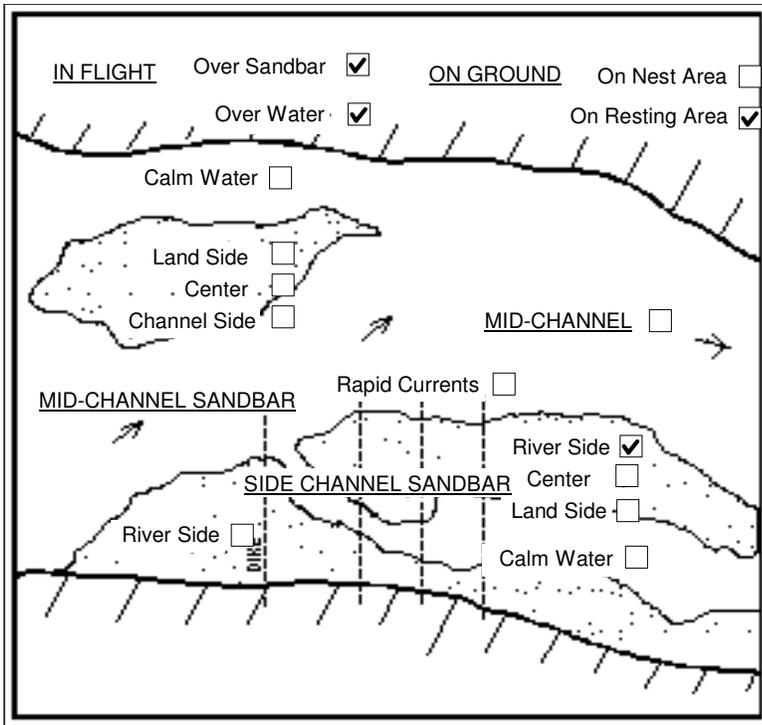
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 23
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: N 5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Long, low, attached sand bar. All terns resting at waterline, no signs of reproductive behavior, resting bar only.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 9:36 RIVER MILE 647.5

LOCALITY: Phillips AR SITE NAME: Kangaroo Point Dikes Lower
County/Parish State

WHERE SITED: Latitude: 34.3677
Longitude: 90.7163

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 42
Juveniles: _____
Eggs: _____
Nests: 3
Chicks: No

SUBSTRATE:

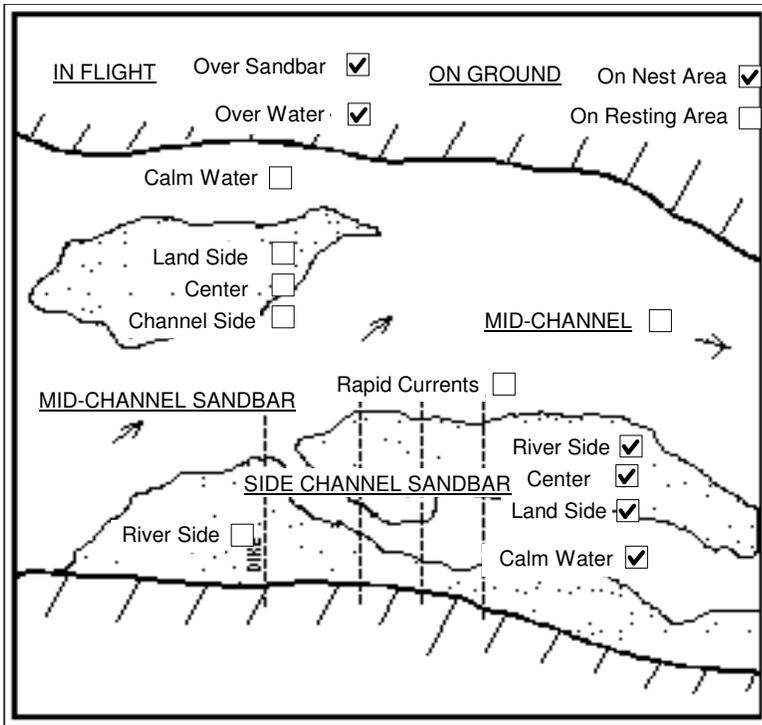
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: N 5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Small, isolated sand bar below last dike. Three terns sitting inland with 300 Rough-wing Swallows. No signs of disturbance.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 9:50 RIVER MILE 643.4

LOCALITY: Coahoma MS SITE NAME: Old Town Bend
County/Parish State

WHERE SITED: Latitude: 34.3428
Longitude: 90.7632

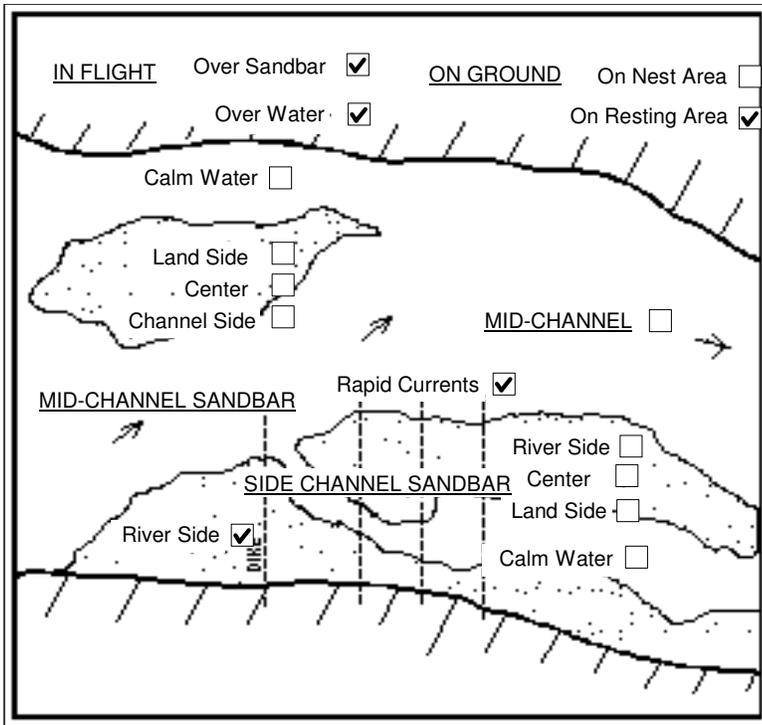
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 47
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 85 °F
Rain: No
Wind: N 5 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Attached, convoluted bar of sand, mud and gravel, with large back chute. Most birds resting or fishing along waterline. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 10:00 RIVER MILE 640.5

LOCALITY: Phillips AR SITE NAME: Island #62 Dikes Upper
County/Parish State

WHERE SITED: Latitude: 34.30384
Longitude: 90.7389

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 28
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

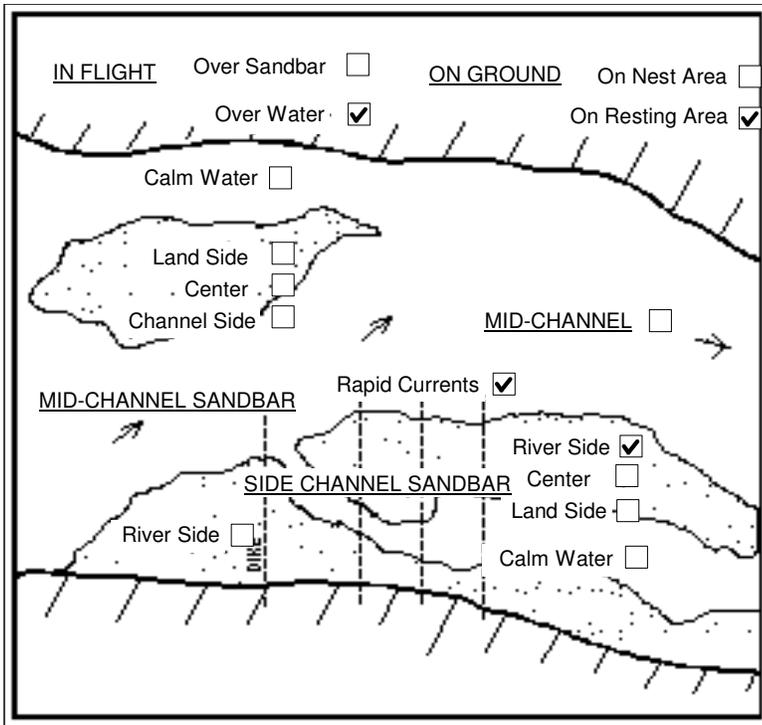
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Gently sloping, attached sand bar upstream from wooded point bar. Most Terns resting at waterline.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 10:15 RIVER MILE 637.0

LOCALITY: Phillips AR SITE NAME: Island #62 Dikes Lower
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 5
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

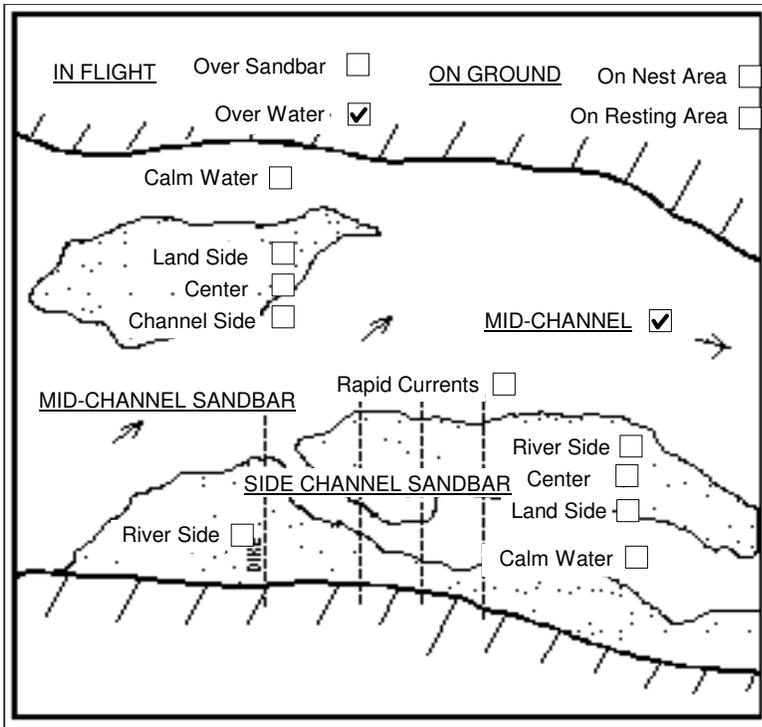
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Five terns fishing mid-channel.

_____ AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 10:28 RIVER MILE 629.5

LOCALITY: Phillips AR SITE NAME: Island #64 Dikes
County/Parish State

WHERE SITED: Latitude: 34.2187
Longitude: 90.8495

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 196
Juveniles: _____
Eggs: 1(2)
Nests: 25
Chicks: Yes

SUBSTRATE:

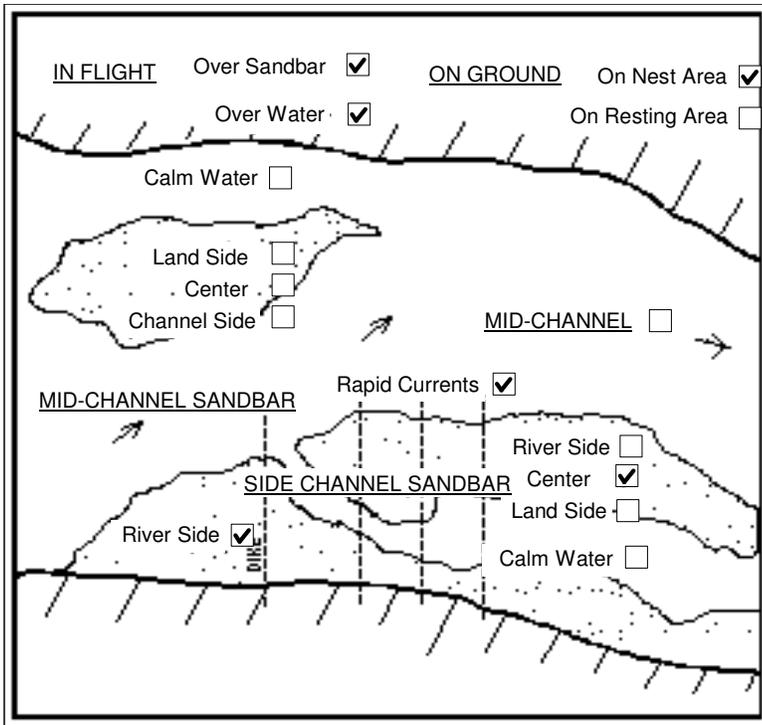
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 600 Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Small, unattached sand bar. Most nests located at bar's high center. Chicks abundant up to 1 week old. Coyote tracks and 12 Canada Geese in colony.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 10:50 RIVER MILE 625.0

LOCALITY: Phillips AR SITE NAME: Sunflower Cut-Off
County/Parish State

WHERE SITED: Latitude: 34.1728
Longitude: 90.8991

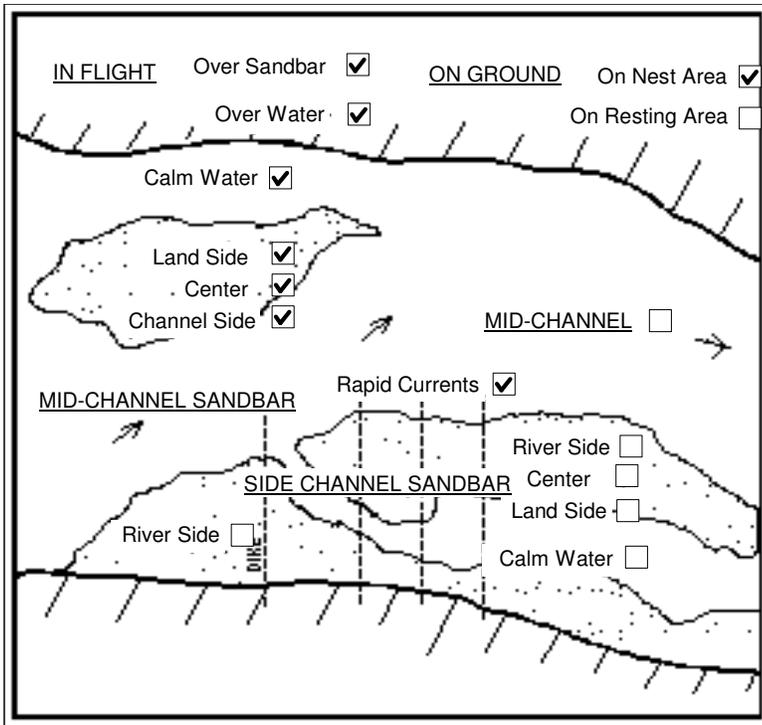
Approximate Distance to Water: 10 Feet

NUMBERS SIGHTED:
Adults: 238
Juveniles: 5
Eggs: 1(3)
Nests: 10
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows/Cottonwoods
Distance: 100 Feet

FIELD CONDITION:
Temperature: 88 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Small (300 x 700ft.), 3 ft. tall, flat, mid-channel bar of sand and mud, unattached at entrance to Desoto Lake. Many juveniles with 10 terns sitting on nests. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 10:57 RIVER MILE 623.0

LOCALITY: Phillips AR SITE NAME: Below Ludlow Dikes
County/Parish State

WHERE SITED: Latitude: 34.1613
Longitude: 90.9277

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 22
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

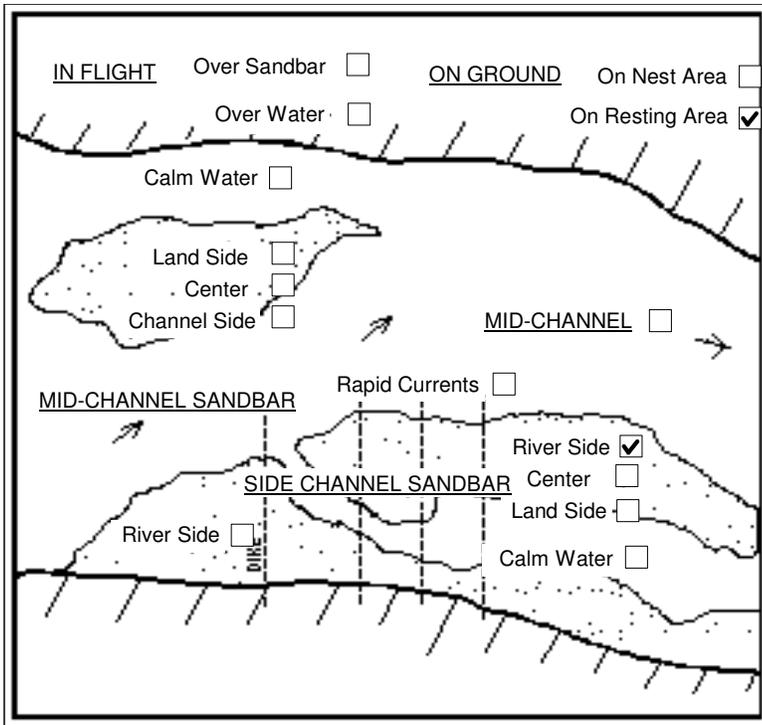
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Small gravel bar with terns resting at waterline No signs of disturbance.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 11:05 RIVER MILE 620.0

LOCALITY: Coahoma MS SITE NAME: Island #67 Dikes Upper
County/Parish State

WHERE SITED: Latitude: 34.1260
Longitude: 90.9528

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 180
Juveniles: _____
Eggs: _____
Nests: 18
Chicks: No

SUBSTRATE:

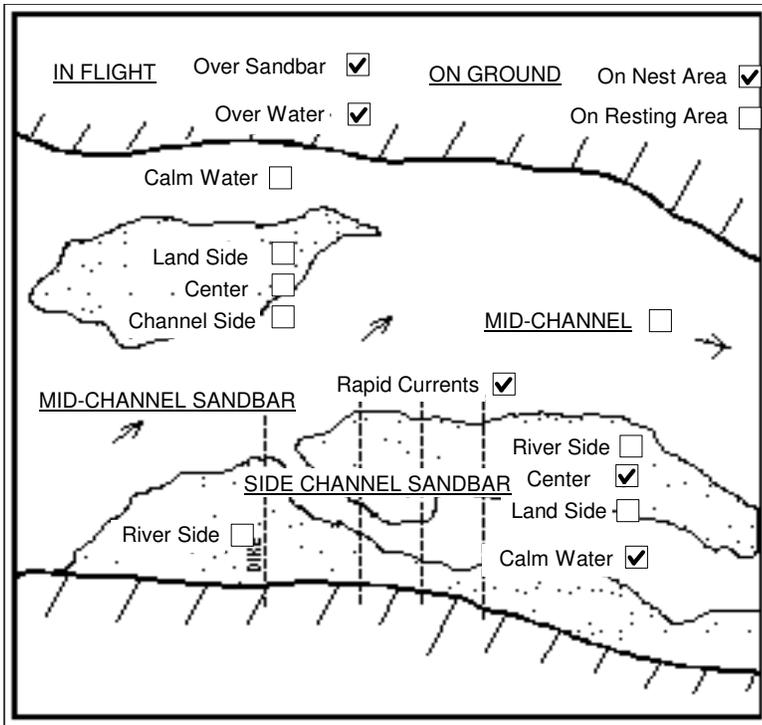
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows/Cottonwoods
Distance: 800 Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Long, medium (800ft. X 1/4 mile), high (8ft.), attached, rippled sand bar with nests along entire length of bar's high center along wrack line. No disturbance or tracks. Seven Great Blue Herons and 1 Canada Goose in proximity.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 11:46 RIVER MILE 619.0

LOCALITY: Coahoma MS SITE NAME: Island #67 Dikes Lower
County/Parish State

WHERE SITED: Latitude: 34.1109
Longitude: 90.9436

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 160
Juveniles: _____
Eggs: 1(1) 9(2) 1(3)
Nests: 11
Chicks: Yes

SUBSTRATE:

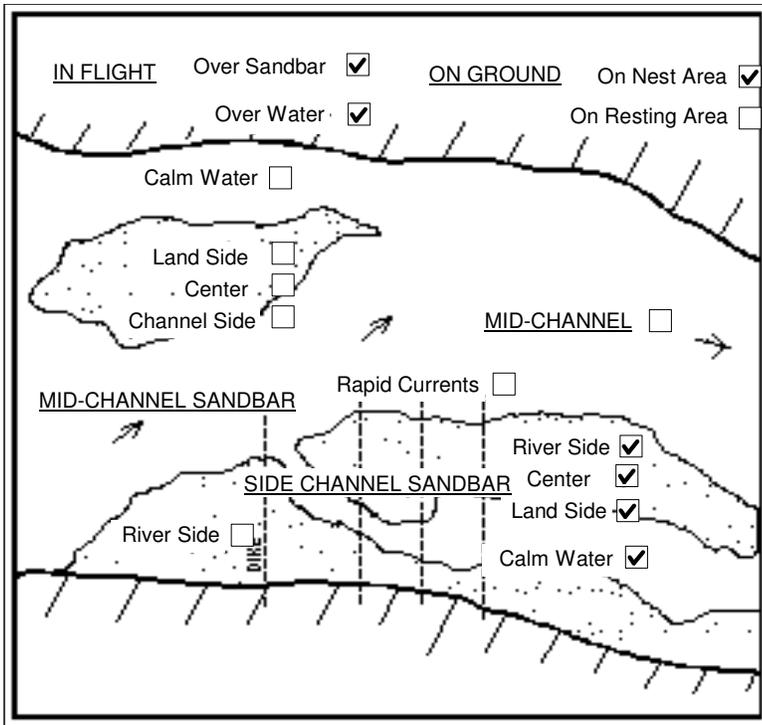
Sand:
Gravel:
Debris:

VEGETATION:

Type: Cottonwoods
Distance: 50 Feet

FIELD CONDITION:

Temperature: 92 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Left Bank. High downstream point of sand bar with many chicks up to 2 weeks of age. One chick mortality, cause unknown. Heavy, continuous mobbing. No tracks or other disturbance, one fingerling carp (sp?).

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 11:56 RIVER MILE 616.0

LOCALITY: Desha AR SITE NAME: Below Knowlton Dikes Upper
County/Parish State

WHERE SITED: Latitude: 34.0811
Longitude: 90.9081

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 69
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

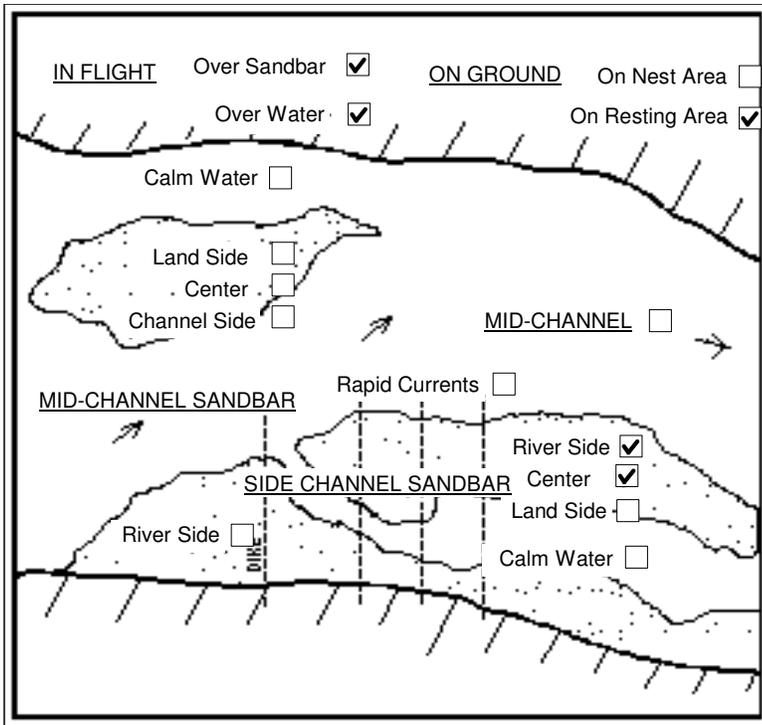
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 94 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Small, unattached sand bar below first dike. Perimeter count yields no nesting terns.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 12:02 RIVER MILE 612.0

LOCALITY: Desha AR SITE NAME: Below Knowlton Dikes Lower
County/Parish State

WHERE SITED: Latitude: 34.04383
Longitude: 90.89169

Approximate Distance to Water: 80 Feet

NUMBERS SIGHTED:

Adults: 49
Juveniles: _____
Eggs: 1(2)
Nests: 18
Chicks: No

SUBSTRATE:

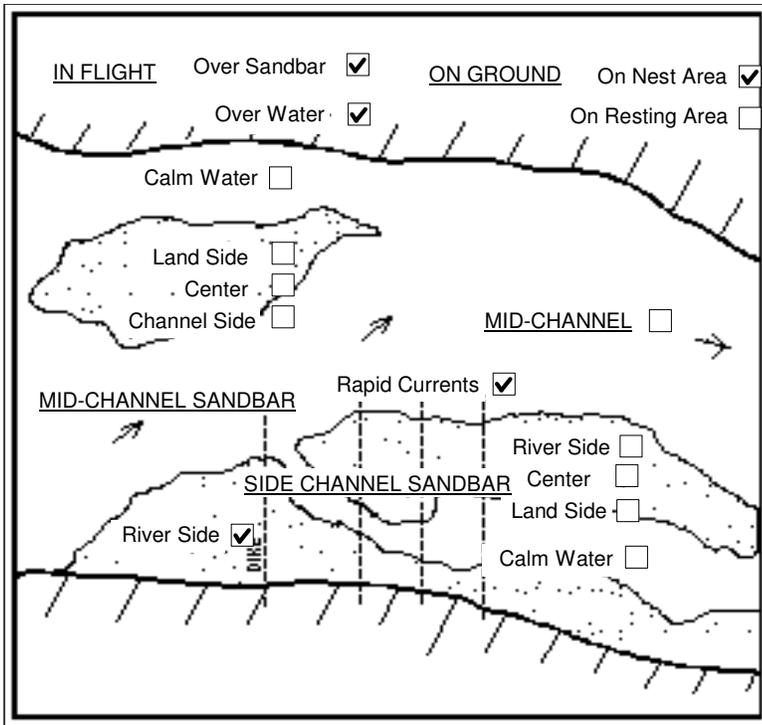
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 93 °F
Rain: No
Wind: NW 10 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Attached, riverside, sand bar, scattered debris. No signs of disturbance.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 12:36 RIVER MILE 608.0

LOCALITY: Bolivar MS COUNTY/Parish State SITE NAME: Island #70 Dikes Upper

WHERE SITED: Latitude: 34.0227
Longitude: 90.9657

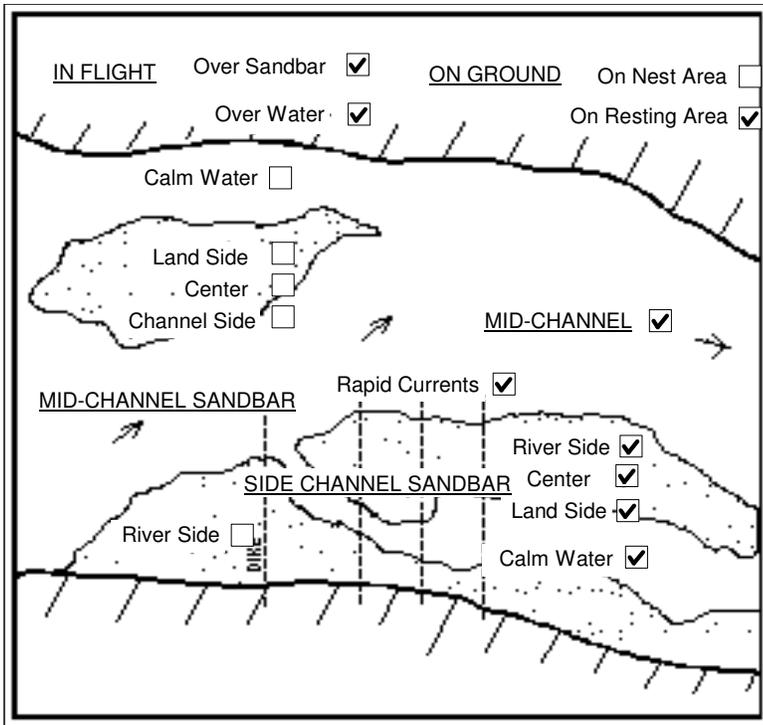
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 82
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 92 °F
Rain: No
Wind: NW 5 mph
% Cloud: 5



OTHER NOTES:

Left Bank. Long, sand and gravel bar with birds at waterline and none sitting inland. Resting bar only. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 12:44 RIVER MILE 606.2

LOCALITY: Bolivar MS SITE NAME: Island #70 Dikes Lower
County/Parish State

WHERE SITED: Latitude: 34.0153
Longitude: 90.9897

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 27
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

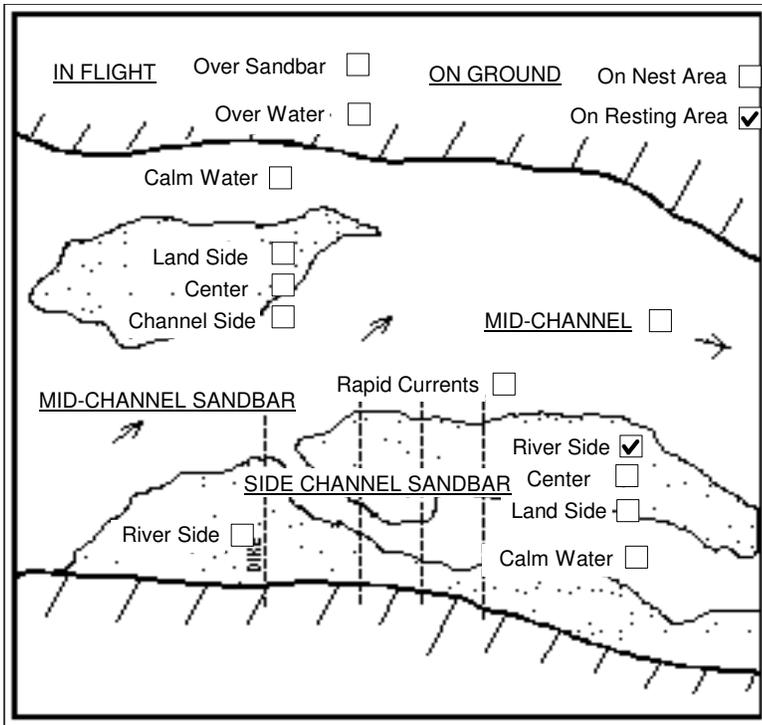
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 200 Feet

FIELD CONDITION:

Temperature: 92 °F
Rain: No
Wind: NW 5 mph
% Cloud: 5



OTHER NOTES:

Left Bank. Small, low, sand and gravel bar (100 x 200 ft.). All birds resting only.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 13:05 RIVER MILE 603.0

LOCALITY: Bolivar MS SITE NAME: Henrico Dikes
County/Parish State

WHERE SITED: Latitude: 33.9945
Longitude: 91.0418

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 98
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

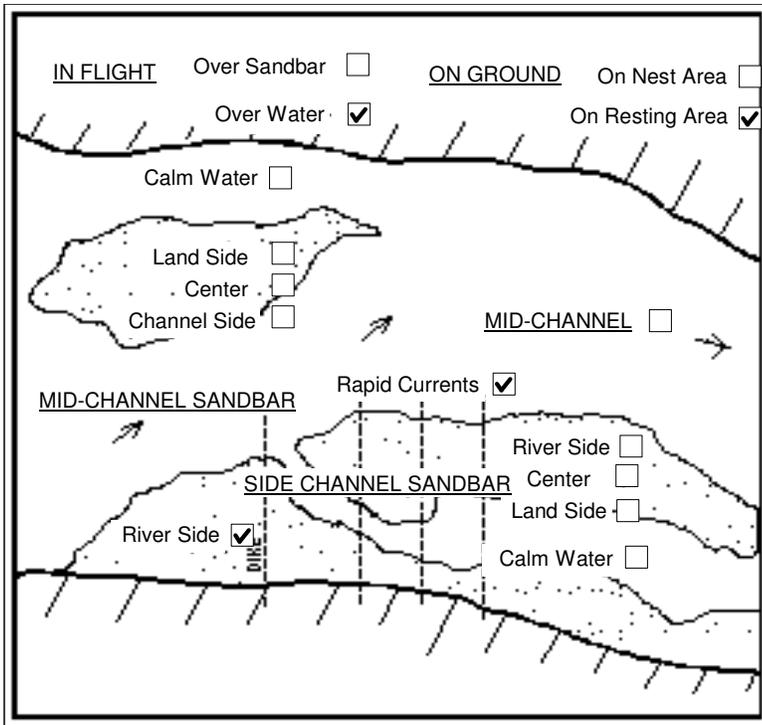
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: NW 5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Long, low, flat, attached river-side sand bar with some debris. Perimeter count yields shows no nesting terns. No disturbance factors noted.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Helena = 16.9 R
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 14:05 RIVER MILE 599.5

LOCALITY: Bolivar MS SITE NAME: Smith Point Dikes
County/Parish State

WHERE SITED: Latitude: 33.9571
Longitude: 91.0798

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 210
Juveniles: _____
Eggs: _____
Nests: 11
Chicks: No

SUBSTRATE:

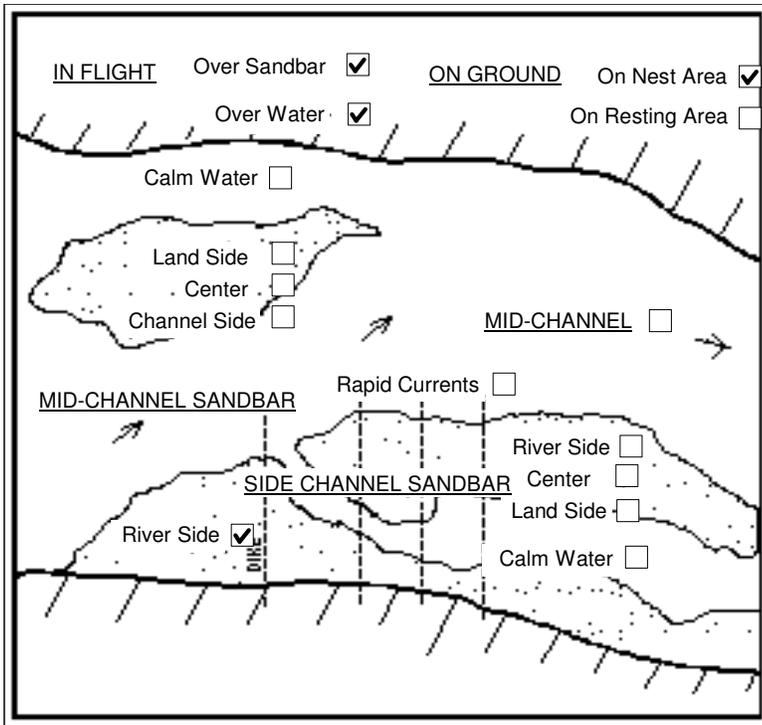
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: NW 5 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Large, attached point bar with undulating and dissected mud and sand. Most birds at waterline, but 11 sitting inland on presumed nests. No disturbance factors noted.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 14:25 RIVER MILE 589.5

LOCALITY: Bolivar MS SITE NAME: Terrene Dikes
County/Parish State

WHERE SITED: Latitude: 33.8415
Longitude: 91.0632

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 167
Juveniles: _____
Eggs: _____
Nests: 7
Chicks: No

SUBSTRATE:

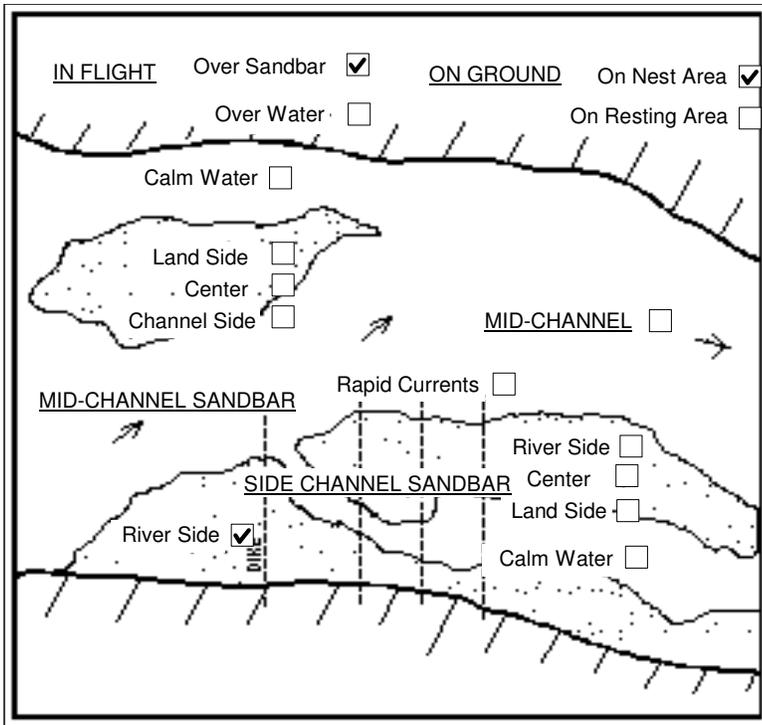
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 94 °F
Rain: No
Wind: NE 5 mph
% Cloud: 10



OTHER NOTES:

Left Bank. Long, unattached, undulating sand bar with some gravel and 7 terns sitting inland on scrapes.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 14:45 RIVER MILE 584.5

LOCALITY: Desha AR SITE NAME: Malone Field Dikes
County/Parish State

WHERE SITED: Latitude: 33.7491
Longitude: 91.0499

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 206
Juveniles: Yes
Eggs: _____
Nests: 10
Chicks: Yes

SUBSTRATE:

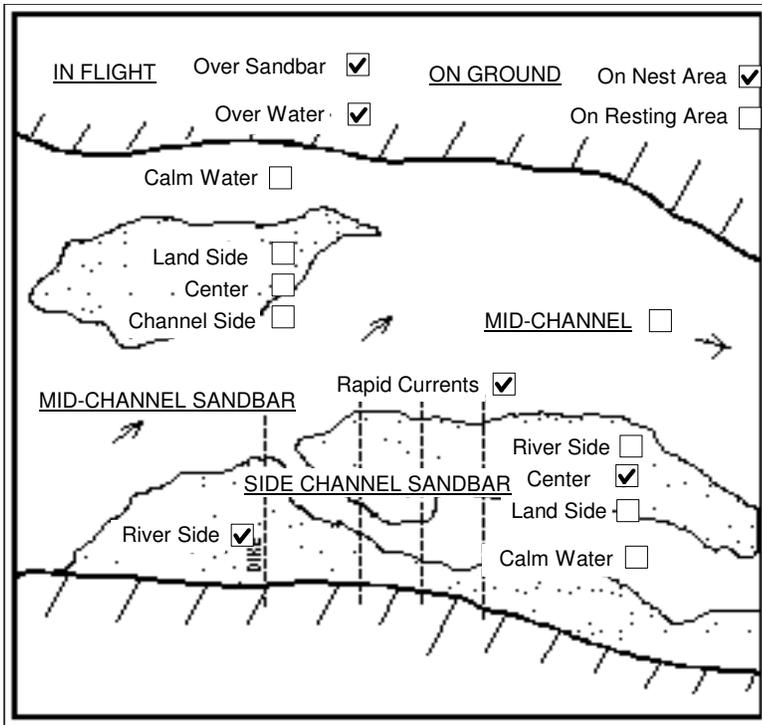
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows/Cottonwoods
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 96 °F
Rain: No
Wind: NE 5 mph
% Cloud: 10



OTHER NOTES:

Right Bank. Broad, wide, high, attached, flat-topped, bar of sand and gravel and wrack lines on higher ground. Coyote tracks in colony.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 15:10 RIVER MILE 579.0

LOCALITY: Bolivar MS SITE NAME: Below Prentiss Dikes
County/Parish State

WHERE SITED: Latitude: 33.7539
Longitude: 91.1285

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 289
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:

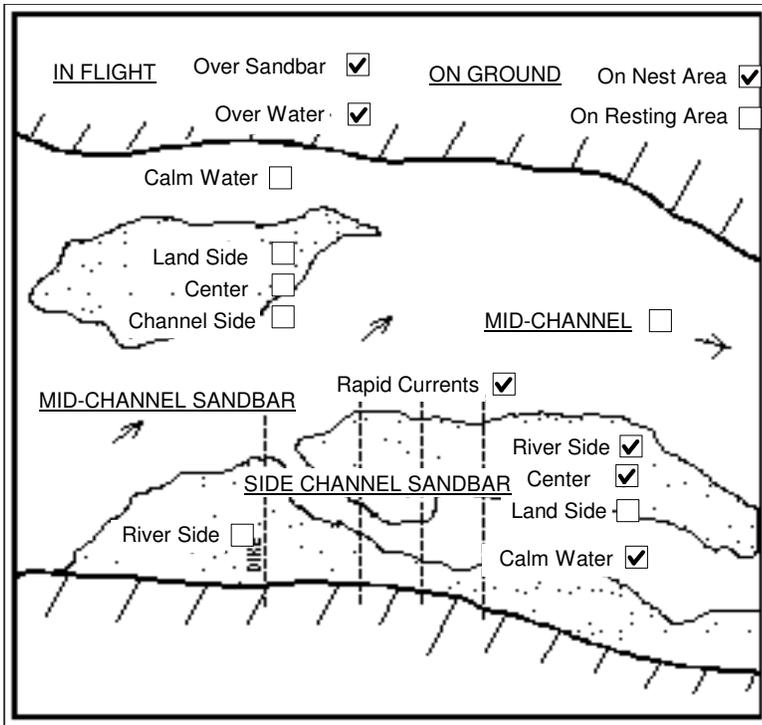
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 98 °F
Rain: No
Wind: NE 5 mph
% Cloud: 10



OTHER NOTES:

Left Bank. Long, flat, unattached sand bar. Perimeter count yields none sitting on scrapes. Many terns fishing in back chute, mid-channel and opposite bank. No disturbance factors.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 15:26 RIVER MILE 574.5

LOCALITY: Desha AR SITE NAME: Caulk Neck Cut-Off
County/Parish State

WHERE SITED: Latitude: 33.7115
Longitude: 91.1652

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 89
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:

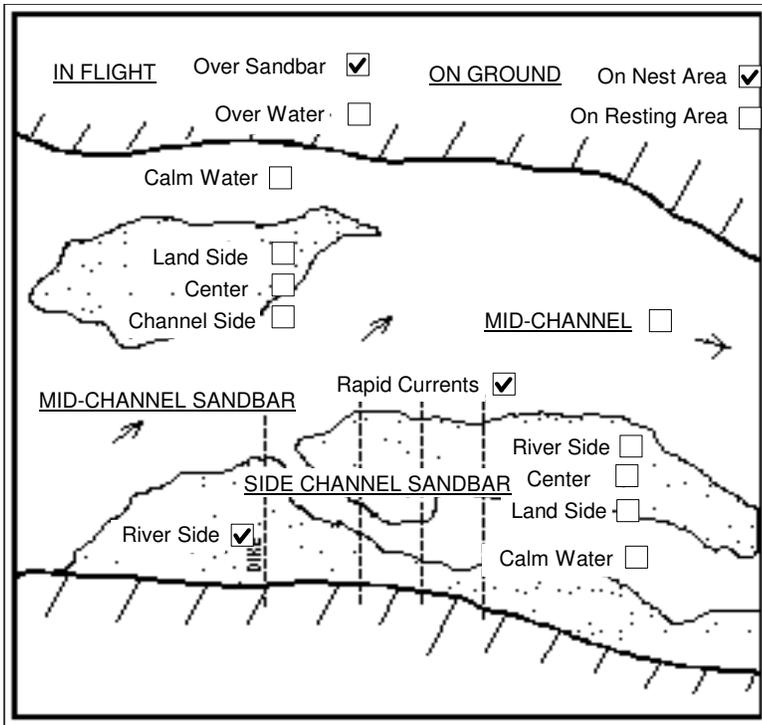
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 500 Feet

FIELD CONDITION:

Temperature: 100° F
Rain: No
Wind: NE 5 mph
% Cloud: 20



OTHER NOTES:

Right Bank. Attached, medium size point bar, with many juveniles but no current nesting activity indicative of a successful colony site. No signs of disturbance.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 15:41 RIVER MILE 568.6

LOCALITY: Bolivar MS SITE NAME: Catfish Point Dikes
County/Parish State

WHERE SITED: Latitude: 33.6592
Longitude: 91.2003

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 171
Juveniles: Yes
Eggs: _____
Nests: 10
Chicks: Yes

SUBSTRATE:

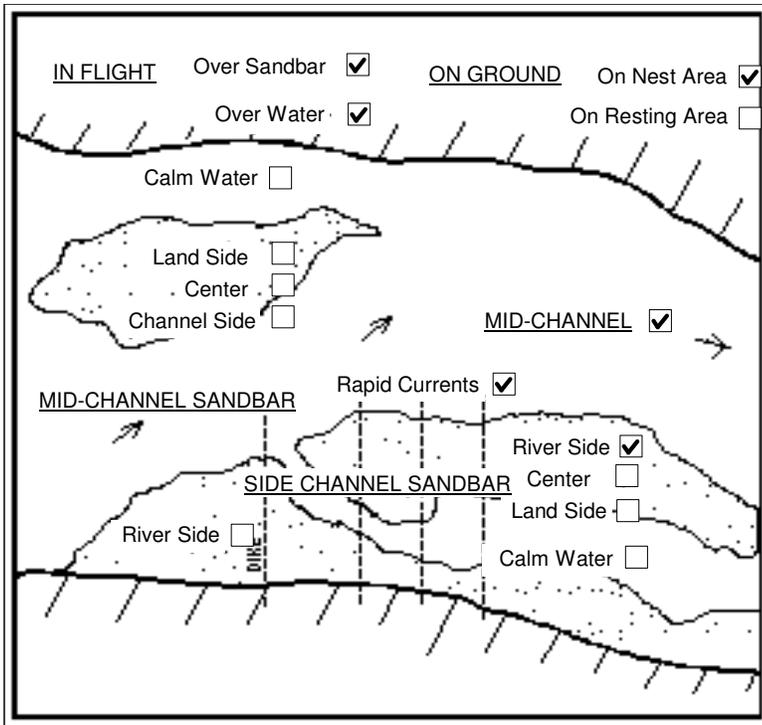
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 94 °F
Rain: No
Wind: NE 5-10 mph
% Cloud: 30



OTHER NOTES:

Left Bank. Wide, attached, sand and gravel bar. Most Least Terns were counted along waterline, but 10 sitting indicated nests in gravel patches. Much courting activity, 2 Mallards present. No signs of disturbance.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 16:01 RIVER MILE 563.0

LOCALITY: Desha AR COUNTY/Parish State SITE NAME: Choctaw Bar Island Upper

WHERE SITED: Latitude: 33.6339
Longitude: 91.1573

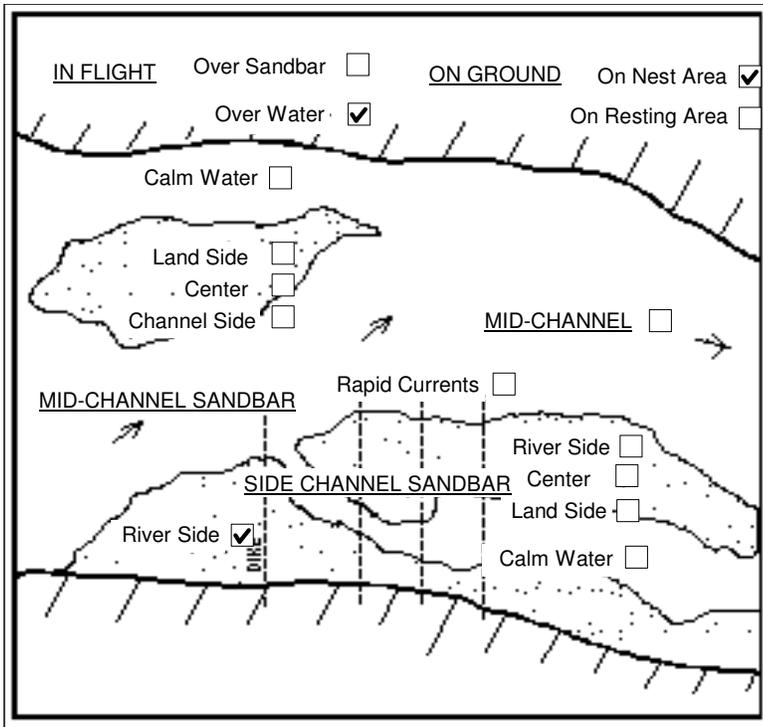
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 151
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 93 °F
Rain: No
Wind: NE 5-10 mph
% Cloud: 30



OTHER NOTES:

Right Bank. Large sand and gravel bar attached to large wooded Choctaw Bar Island. Birds restin along waterline and feeding juvenile chicks. No disturbance factors.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 16:10 RIVER MILE 558.5

LOCALITY: Desha AR COUNTY/PARISH STATE SITE NAME: Choctaw Bar Island Lower

WHERE SITED: Latitude: 33.5836
Longitude: 91.167

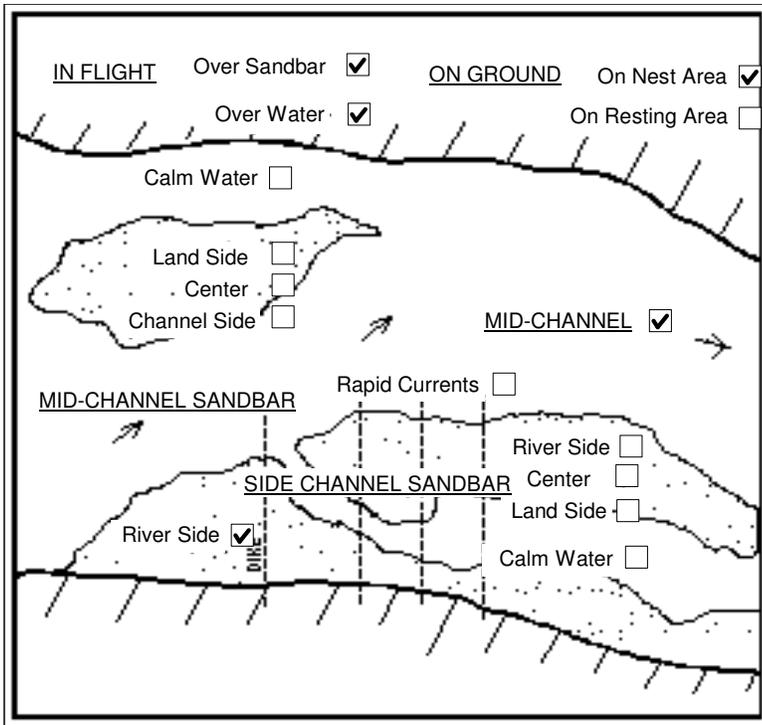
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 166
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows
Distance: 500 Feet

FIELD CONDITION:
Temperature: 96 °F
Rain: No
Wind: NE 5-8 mph
% Cloud: 30



OTHER NOTES:

Right Bank. Back chute behind Choctaw Bar Island, attached, river side bar. All birds resting at waterline, feeding juveniles, or fishing in back chute, no visible disturbance factors.

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 16:18 RIVER MILE 554.5

LOCALITY: Bolivar MS SITE NAME: Huntington Point
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

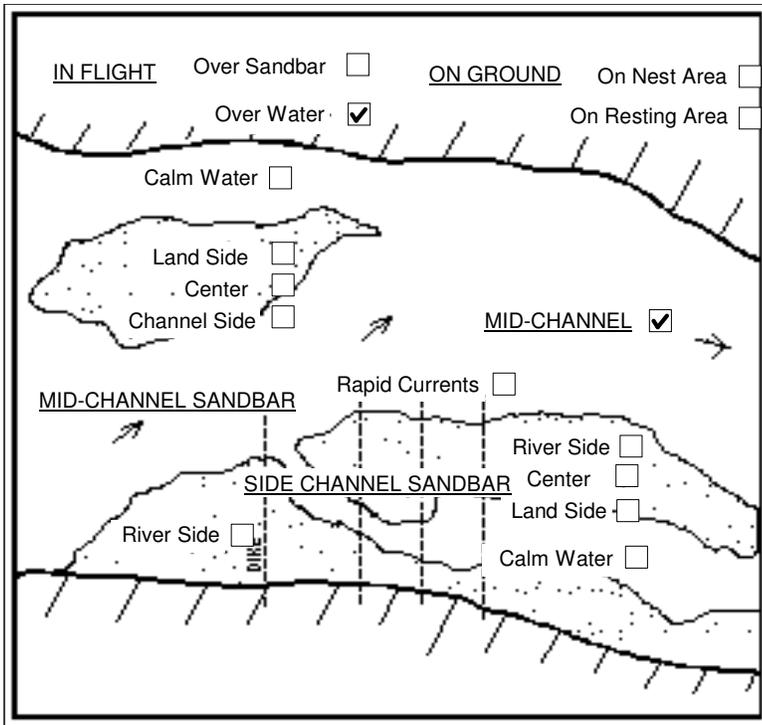
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 3
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 96 °F
Rain: No
Wind: NE 5-10 mph
% Cloud: 30



OTHER NOTES:
Three terns fishing mid-channel.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Arkansas City = 17.2 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 17:12 RIVER MILE 540.0

LOCALITY: Washington MS SITE NAME: Leland Neck Dikes
County/Parish State

WHERE SITED: Latitude: 33.3970
Longitude: 91.1087

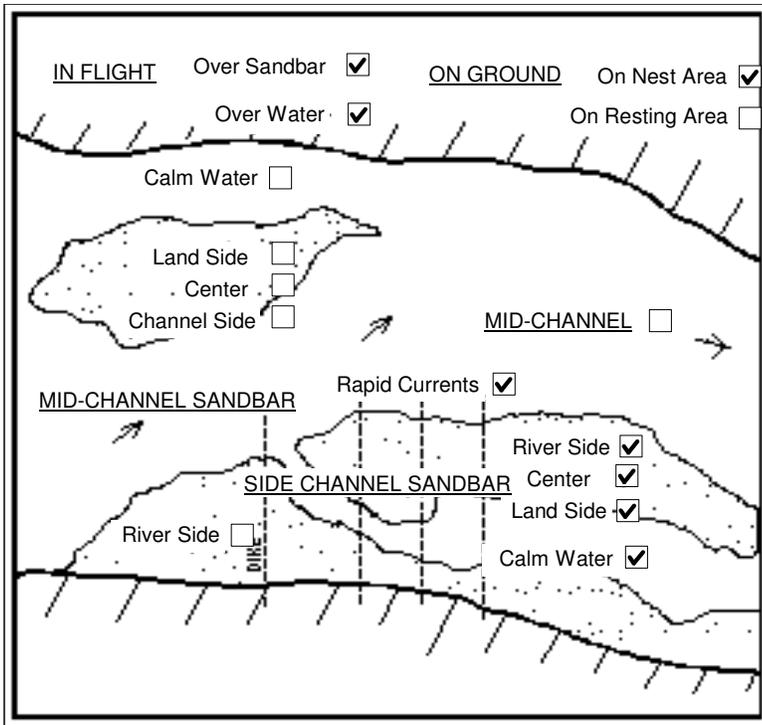
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 133
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 91 °F
Rain: No
Wind: NE 5 mph
% Cloud: 30



OTHER NOTES:

Left Bank. Small, low, unattached sand bar 3 miles upstream from entrance to Greenville harbor. No tracks or other disturbance within colony.

MS side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Greenville = 28.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/29/2008 TIME OF DAY: 17:36 RIVER MILE 539.0

LOCALITY: Chicot AR SITE NAME: Tarpley Cut-Off dikes
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

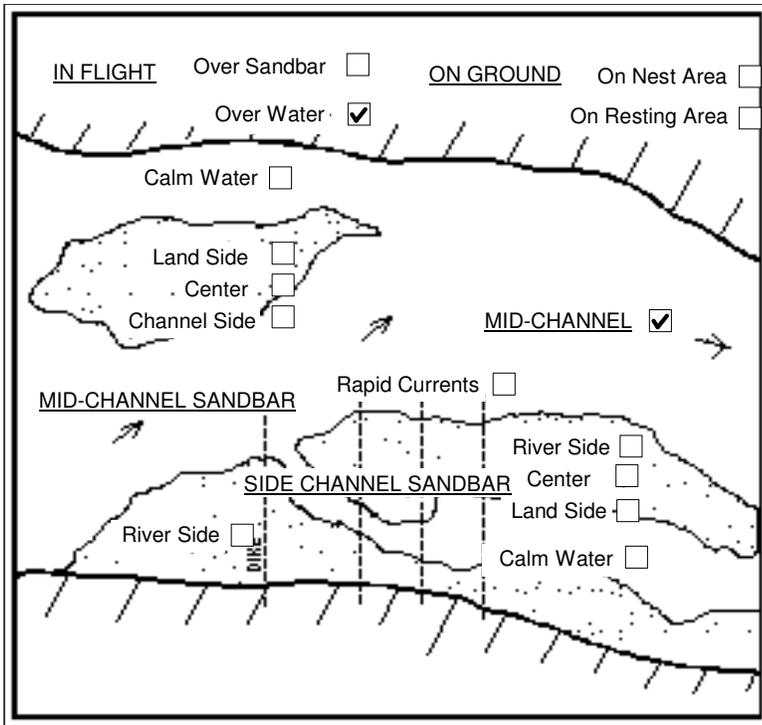
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 1
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: 0 Feet

FIELD CONDITION:
Temperature: 91 °F
Rain: No
Wind: NE 5 mph
% Cloud: 30



OTHER NOTES:
One fishing mid-channel

AR side

OBSERVERS: Boyd, Fowlkes, K. Jones, W. Jones, Maloney, Rumancik

RIVER GAGE READING: Greenville = 28.6 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 9:02 RIVER MILE 534.0

LOCALITY: Washington MS SITE NAME: Island #84 Dikes
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:

Adults: 270
Juveniles: _____
Eggs: _____
Nests: 40
Chicks: No

SUBSTRATE:

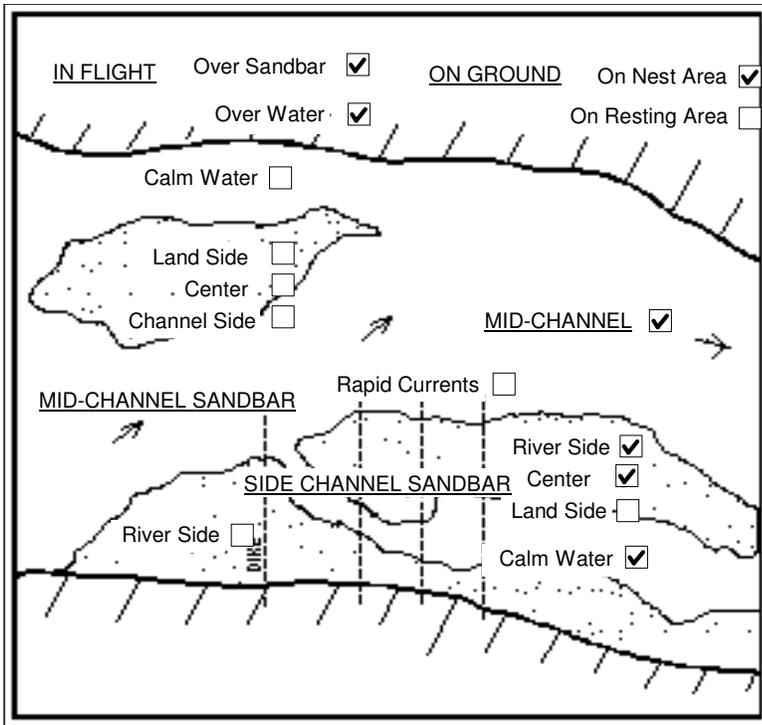
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: W 12 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Large (3 x 1/2 mile), flat, sand bar with scattered debris and lignite. Colony spread across entire bar with fishing on all sides and no signs of disturbance. Thousands of Rough-wing Swallows and Purple Martins.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 9:35 RIVER MILE 529.0

LOCALITY: Washington MS SITE NAME: Refuge Dikes
County/Parish State

WHERE SITED: Latitude: 33.26653
Longitude: 91.12264

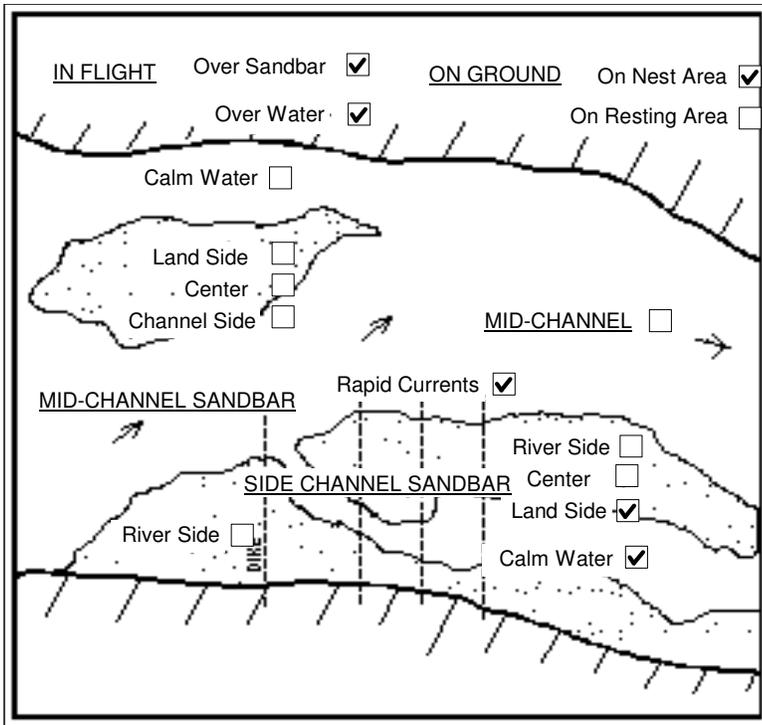
Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:
Adults: 65
Juveniles: _____
Eggs: 4 (1)
Nests: 4
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows/Grass
Distance: 200 Feet

FIELD CONDITION:
Temperature: 78 °F
Rain: No
Wind: W 12 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Small, high, clean, unattached undulating sand bar below 1st dike. Approximately 1/4 mile long and wide, with upper end of mud flats. 1000 Rough-wing Swallows.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 9:50 RIVER MILE 526.5

LOCALITY: Chico AR SITE NAME: Aconia Chute Dikes
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

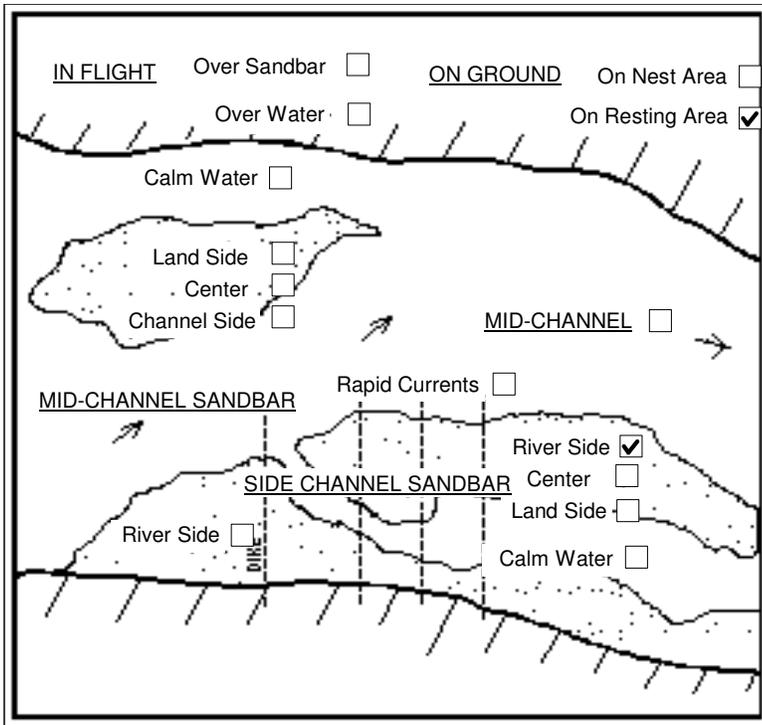
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 26
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 87 °F
Rain: No
Wind: W 12 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Small, unattached, sandbar (300x 100 ft.). All terns resting at waterline. No signs of disturbance.

AR side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 10:20 RIVER MILE 518.0

LOCALITY: Chico AR SITE NAME: Island #86 Dikes
County/Parish State

WHERE SITED: Latitude: 33.12910
Longitude: 91.10169

Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:

Adults: 147
Juveniles: _____
Eggs: 3(1) 4(2)
Nests: 7
Chicks: No

SUBSTRATE:

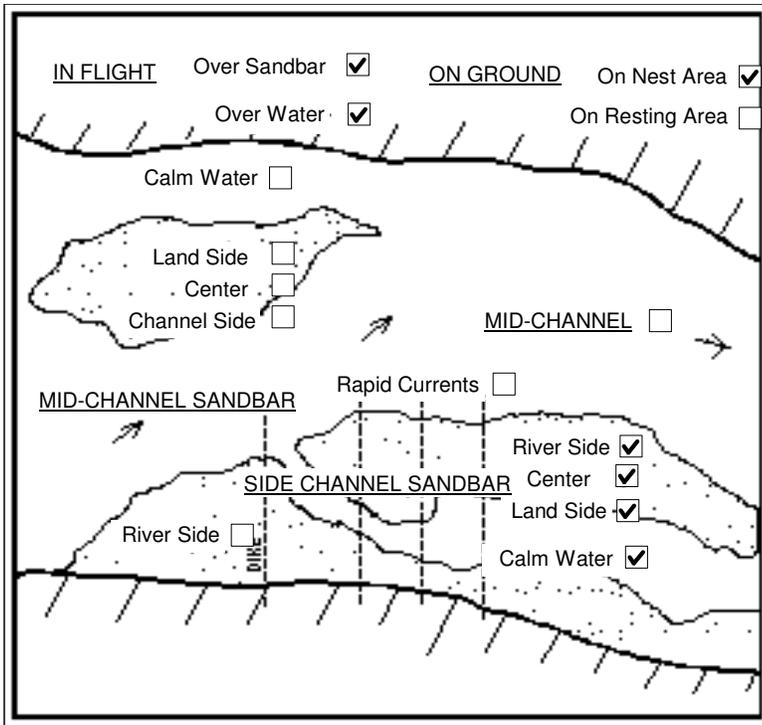
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: W 10 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Small, unattached, low (1/2 x 1/4 mile) flat, sand bar. Birds sitting inland on scrapes, others fishing back chute, courting or resting at waterline. No tracks or disturbance noted. White Bass and Silver Carp fingerlings.

AR side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 10:45 RIVER MILE 514.0

LOCALITY: Washington MS SITE NAME: Leota Dikes
County/Parish State

WHERE SITED: Latitude: 33.09132
Longitude: 91.16353

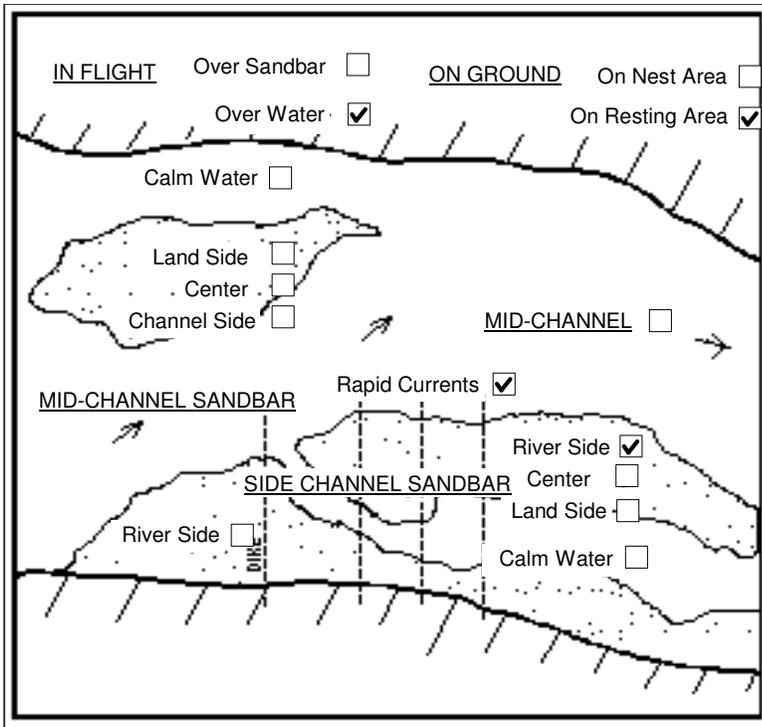
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 166
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 86 °F
Rain: No
Wind: W 10 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Long, sand and gravel bar, attached with birds all resting at waterline or fishing opposite bank
revetment. No tracks observed.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 11:14 RIVER MILE 508.5

LOCALITY: Chicot AR SITE NAME: Cracraft Lower Dikes Upper
County/Parish State

WHERE SITED: Latitude: 33.03810
Longitude: 91.15770

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 60
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

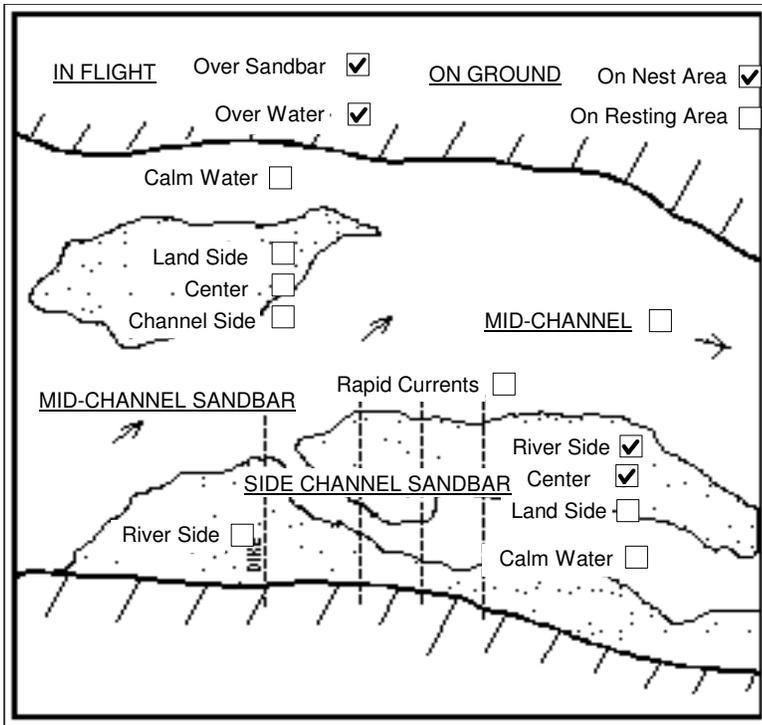
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: W 10-12 mph
% Cloud: 60



OTHER NOTES:

Right Bank. Upstream point of island at Cracraft dikes, clean sand, terns on scrapes . One Silver Carp and 3 Anhingas in vicinity.

AR side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 11:23 RIVER MILE 507.5

LOCALITY: Chicot AR SITE NAME: Cracraft Lower Dikes Lower
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

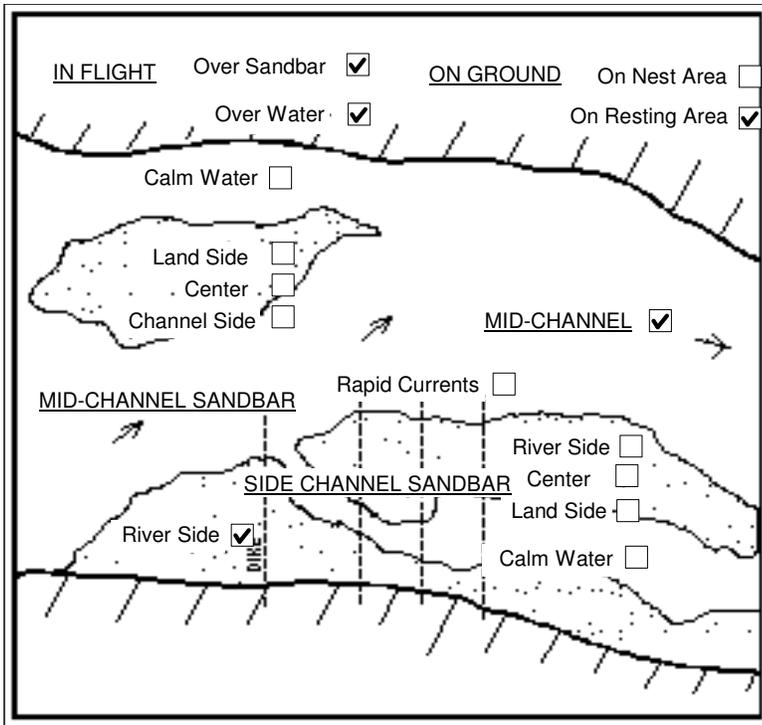
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 19
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows/Cottonwoods
Distance: 300 Feet

FIELD CONDITION:
Temperature: 89 °F
Rain: No
Wind: W 10 mph
% Cloud: 40



OTHER NOTES:

Right Bank. Long, narrow, attached, riverside sand bar. All terns resting at waterline. Great Blue Heron, Cattle Egrets and Great Egrets present also. No disturbance noted.

AR side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 11:55 RIVER MILE 503.5

LOCALITY: Issaquena MS COUNTY/Parish STATE SITE NAME: Corregidor Dikes

WHERE SITED: Latitude: 32.95736
Longitude: 91.14347

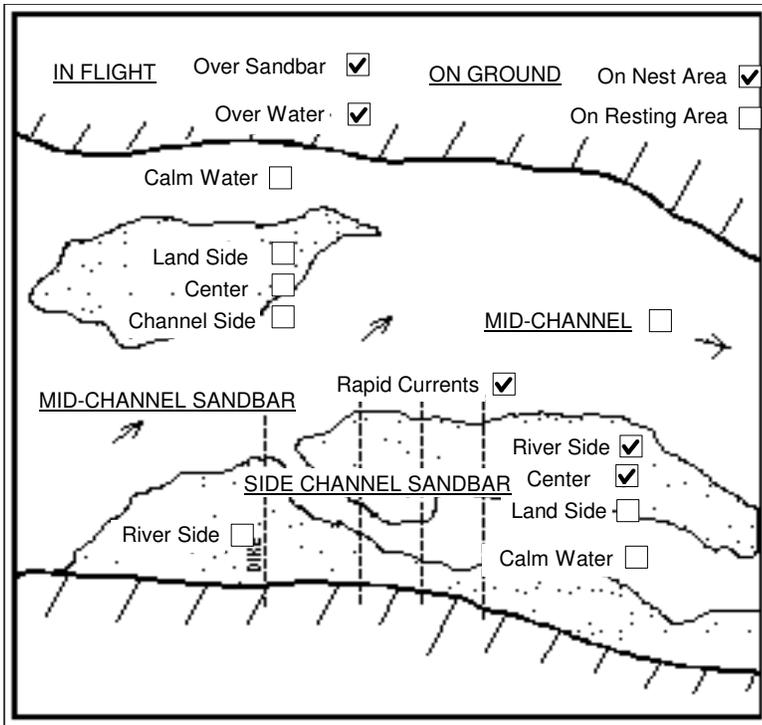
Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:
Adults: 243
Juveniles: _____
Eggs: 1(1) 2(2)
Nests: 35
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 93 °F
Rain: No
Wind: W 8-10 mph
% Cloud: 10



OTHER NOTES:

Left Bank. Long (1.5 mile), wide (1 mile), high, flat, unattached, crescent shaped sand and mud bar in bend of Sarah Cut-Off (attached in 2006). Nests widely spaced along top and backside. Breasting and feeding on both sides. No signs of disturbance.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 12:13 RIVER MILE 499.0

LOCALITY: East Carroll LA SITE NAME: Wilson Point Dikes
County/Parish State

WHERE SITED: Latitude: 32.9435
Longitude: 91.0833

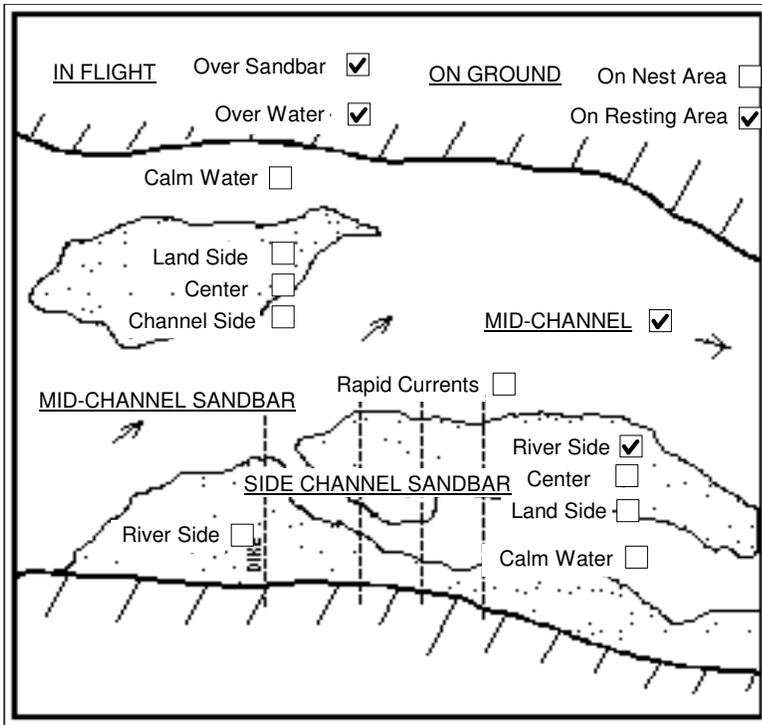
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 149
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows
Distance: 150 Feet

FIELD CONDITION:
Temperature: 92 °F
Rain: No
Wind: W 5 mph
% Cloud: 10



OTHER NOTES:

Right Bank. Attached, sand bar above last visible dike. Most Terns observed resting at waterline or fishing during perimeter count with some courting behavior. No disturbance factors noted.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 13:07 RIVER MILE 495.4

LOCALITY: East Carroll LA SITE NAME: Cottonwood Landing
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

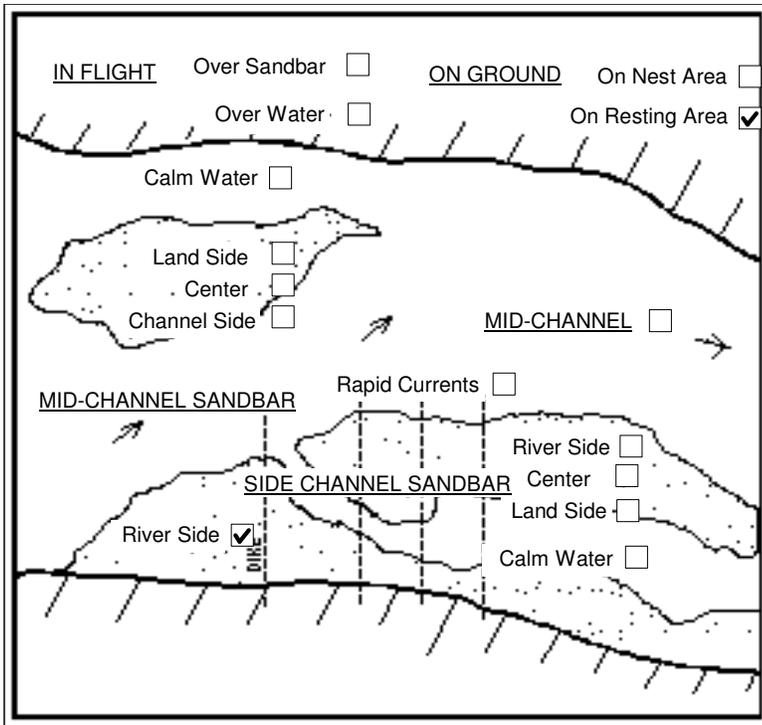
Approximate Distance to Water: 0 Feet

NUMBERS SIGHTED:
Adults: 52
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 91 °F
Rain: No
Wind: W 8 mph
% Cloud: 40



OTHER NOTES:

Right Bank. Low, small (1/4 mile x 800 ft.), attached, point of sand below wooded island. Juveniles present indicate prior colony site. No disturbance factors observed.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 13:21 RIVER MILE 491.5

LOCALITY: Issaquena MS COUNTY/Parish State SITE NAME: Baleshed Landing Dikes

WHERE SITED: Latitude: 32.8417
Longitude: 91.1278

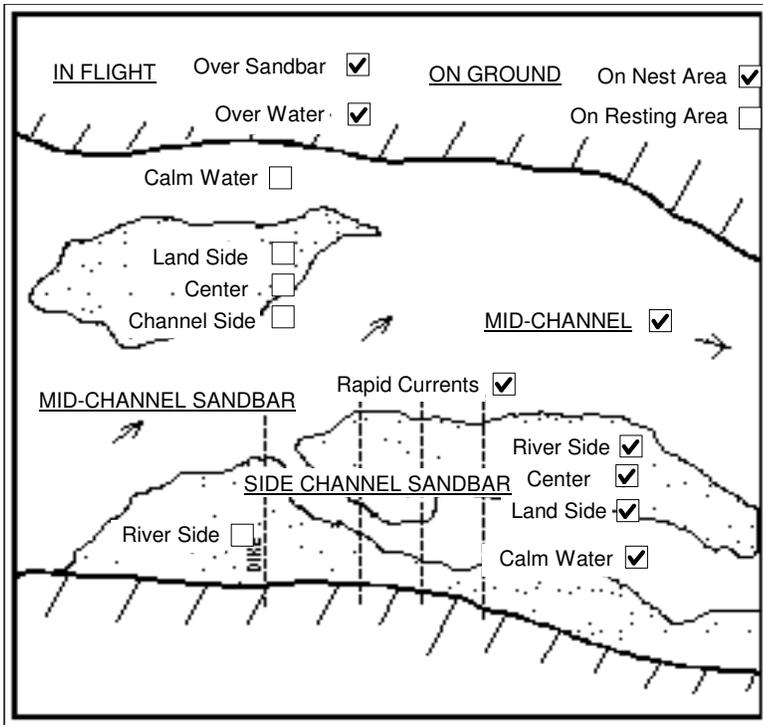
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 83
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 92 °F
Rain: No
Wind: W 5-10 mph
% Cloud: 60



OTHER NOTES:

Left Bank. Small (100 x 600 ft.), barely exposed (2ft.) clean, sand bar upstream from Stack Island. No disturbance factors noted.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Greenville = 28.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 13:40 RIVER MILE 482.5

LOCALITY: Issaquena MS COUNTY/Parish State SITE NAME: Ajax Bar Dikes Upper

WHERE SITED: Latitude: 32.74550
Longitude: 91.14376

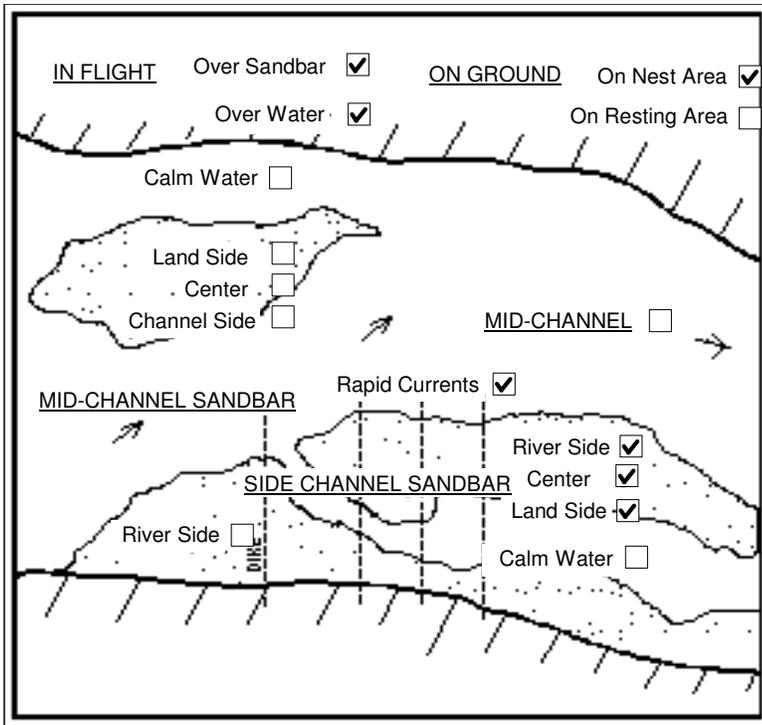
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 151
Juveniles: _____
Eggs: _____
Nests: 12
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 93 °F
Rain: No
Wind: W 5-8 mph
% Cloud: 60



OTHER NOTES:

Left Bank. Broad, high, undulating, attached, sand bar. Terns catching fish, breasting and feeding chicks at waterline. No tracks or disturbance signs.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 13:56 RIVER MILE 480.8

LOCALITY: Issaquena MS COUNTY/Parish State SITE NAME: Ajax Bar Dikes Lower

WHERE SITED: Latitude: 32.73746
Longitude: 91.11895

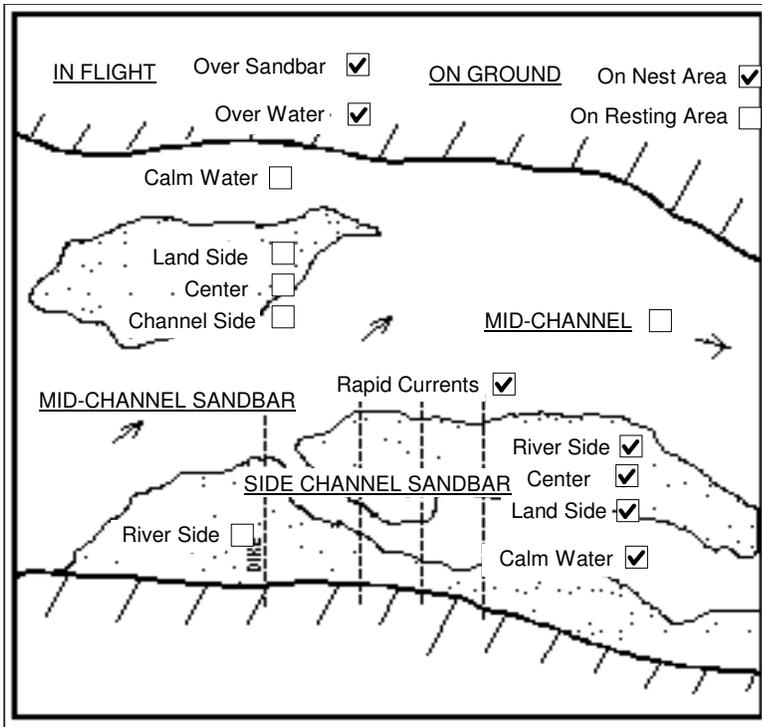
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 95
Juveniles: _____
Eggs: _____
Nests: 3
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 98 °F
Rain: No
Wind: W 5-8 mph
% Cloud: 40



OTHER NOTES:

Left Bank. High, flat-topped, mid-sized (400 x 900 ft.) sand bar with terns breasting, fishing and courting. Chicks up to 2 weeks old, but no nests observed. No tracks or disturbance factors.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 14:15 RIVER MILE 475.0

LOCALITY: East Carroll LA SITE NAME: Point Lookout Dike
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

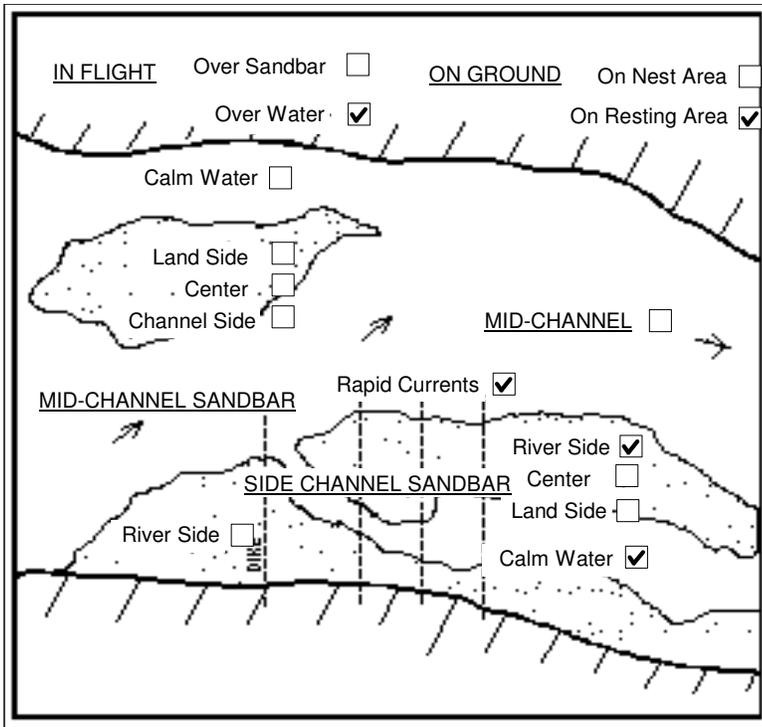
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 75
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 92 °F
Rain: No
Wind: W 5 mph
% Cloud: 30



OTHER NOTES:

Right Bank. Low, small (2 acre) flat, wet, unattached sand bar in Filter Bend. No tracks or disturbance.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 14:20 RIVER MILE 470.0

LOCALITY: Issaquena MS COUNTY/Parish State SITE NAME: Arcadia Point Dikes

WHERE SITED: Latitude: NA Longitude: NA

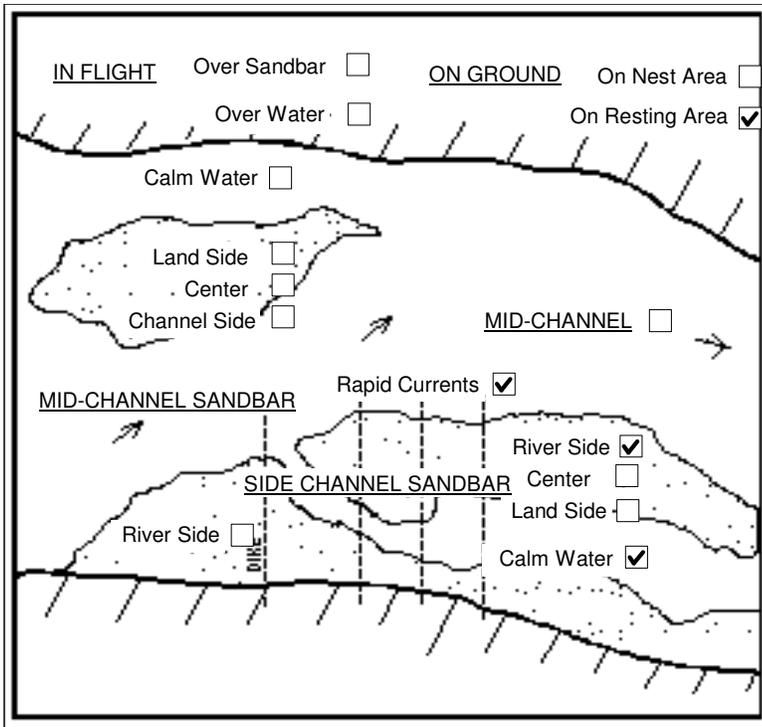
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 61
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 94 °F
Rain: No
Wind: W 5 mph
% Cloud: 65



OTHER NOTES:

Left Bank. Small (600 x 150ft.), low, clean, flat, unattached sand bar. All birds resting at waterline. Storm approaching with 28 White Pelicans 1 mile downstream.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 15:00 RIVER MILE 461.0

LOCALITY: East Carroll LA SITE NAME: Willow Cutoff Dikes
County/Parish State

WHERE SITED: Latitude: 32.5361
Longitude: 91.1006

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 84
Juveniles: _____
Eggs: _____
Nests: 10
Chicks: No

SUBSTRATE:

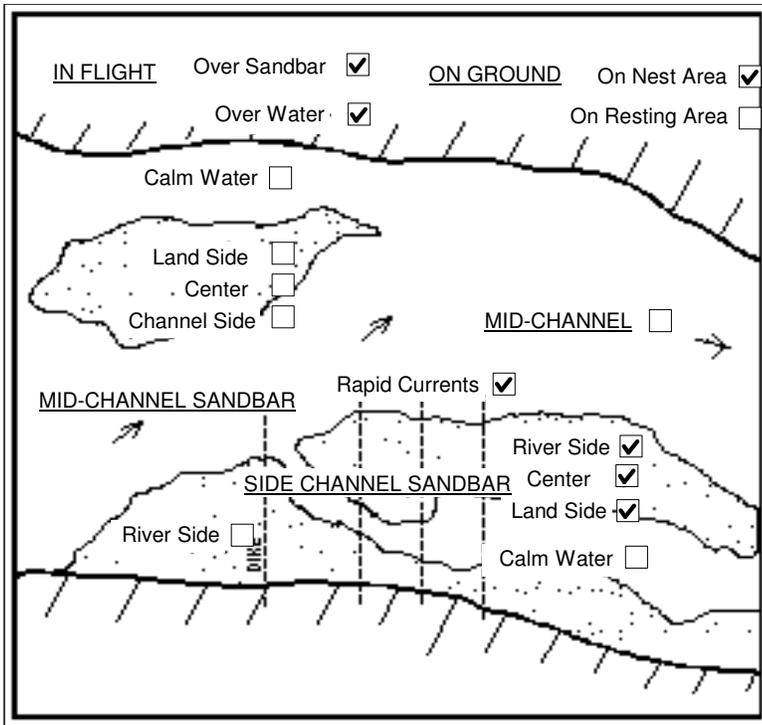
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: W 10 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Series of small, unattached, low sand bars up to 2 ft. in elevation. Ten terns sitting on nests after thunderstorm. No othe disturbance noted.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 15:42 RIVER MILE 447.0

LOCALITY: Madison LA SITE NAME: Marshall Cutoff Dikes
County/Parish State

WHERE SITED: Latitude: 32.40516
Longitude: 91.00311

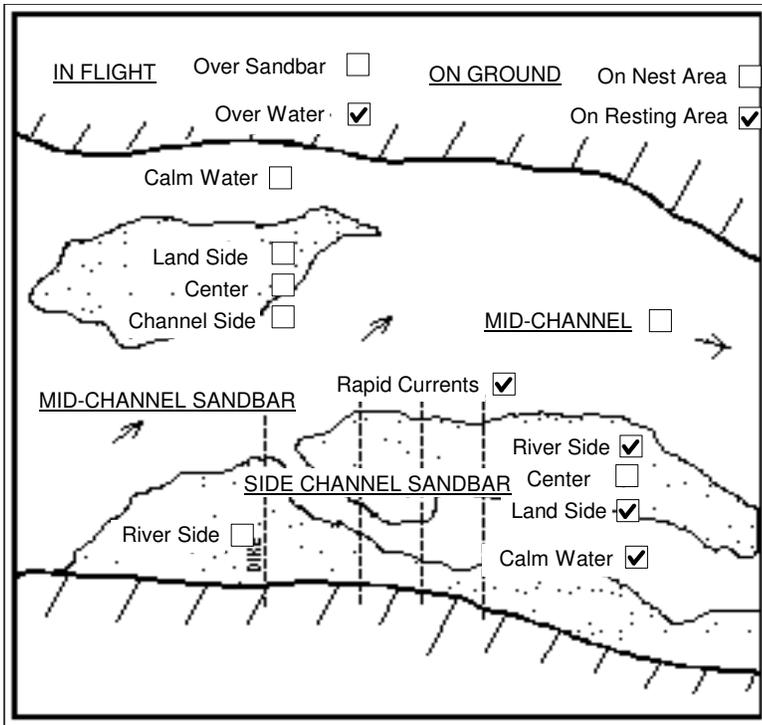
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 63
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Cottonwoods
Distance: 500 Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: W 5 mph
% Cloud: 70



OTHER NOTES:

Right Bank. Unattached, small, low sand bar (200 x 300 ft.) downstream of last dike. No nesting activity observed. Coyote observed on bar along with an egret, Red-shouldered Hawk. Humand and deer tracks also.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/30/2008 TIME OF DAY: 16:28 RIVER MILE 437.0

LOCALITY: Warren MS SITE NAME: Vicksburg Harbor
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

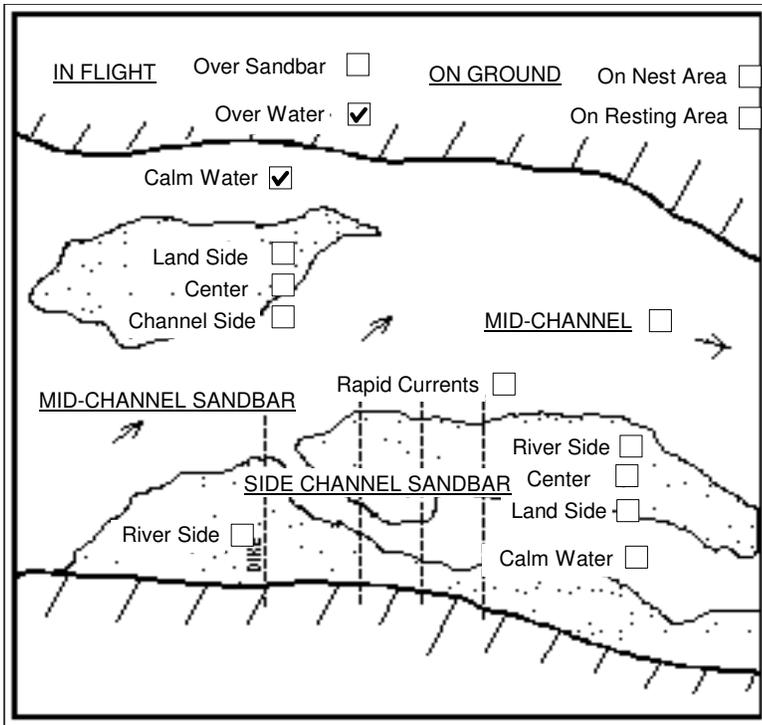
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 18
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: W 5 mph
% Cloud: 70



OTHER NOTES:

Eighteen terns feeding in Vicksburg Harbor.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 23.1 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 10:20 RIVER MILE 425.5

LOCALITY: Madison LA SITE NAME: Letourneau Landing
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

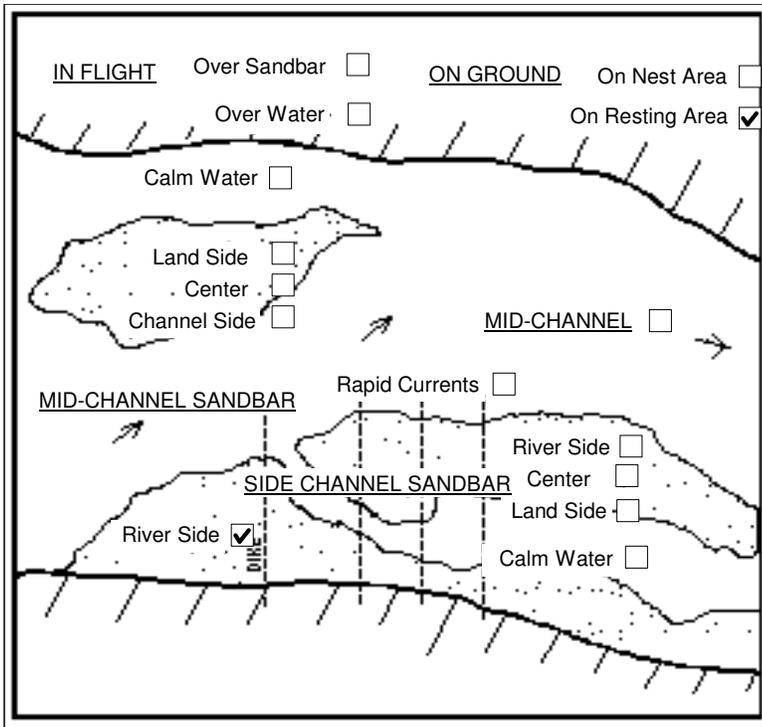
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 20
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows
Distance: 60 Feet

FIELD CONDITION:
Temperature: 83 °F
Rain: No
Wind: W 12 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Small (80 x 100 ft.), attached sand bar. All terns resting at waterline. No disturbance noted.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 22.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 10:39 RIVER MILE 419.0

LOCALITY: Madison LA SITE NAME: Newton Bend Dikes
County/Parish State

WHERE SITED: Latitude: 32.1367
Longitude: 91.0100

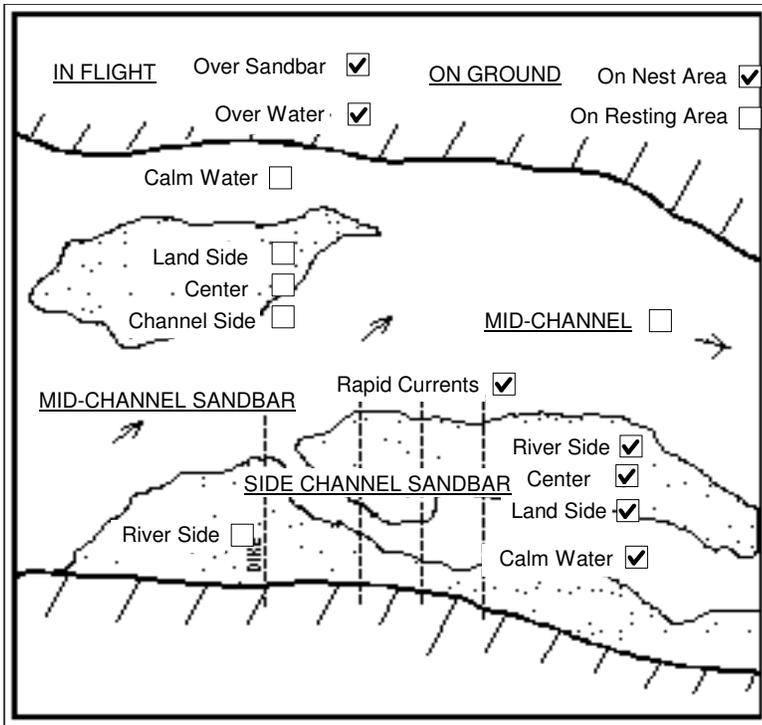
Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:
Adults: 52
Juveniles: _____
Eggs: _____
Nests: 8
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Willows
Distance: 15 Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: W 12 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Small, steep, undulating bar only 80 feet wide, attached with scattered willows up to 15 ft. tall. No tracks or signs of disturbance Turkey Vultures in vicinity.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 22.5 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 11:00 RIVER MILE 414.0

LOCALITY: Tensas LA SITE NAME: Togo Island Dikes
County/Parish State

WHERE SITED: Latitude: 32.10940
Longitude: 91.10172

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 1
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

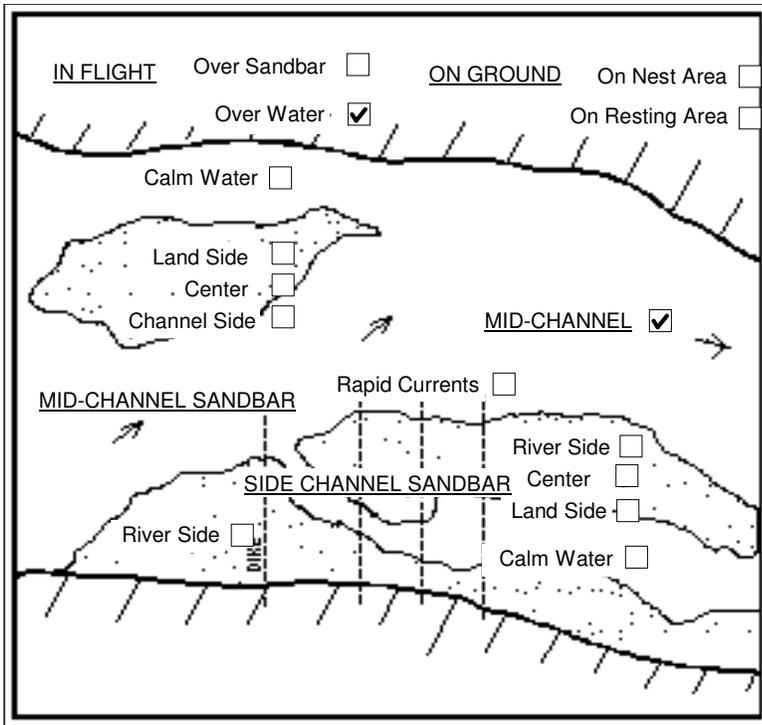
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: W 12 mph
% Cloud: 100



OTHER NOTES:

One tern in transit mid-channel.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 22.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 11:18 RIVER MILE 410.0

LOCALITY: Claiborne MS SITE NAME: Yucatan Dikes
County/Parish State

WHERE SITED: Latitude: 32.07094
Longitude: 91.07669

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 150
Juveniles: _____
Eggs: 1(1) 1(2)
Nests: 19
Chicks: No

SUBSTRATE:

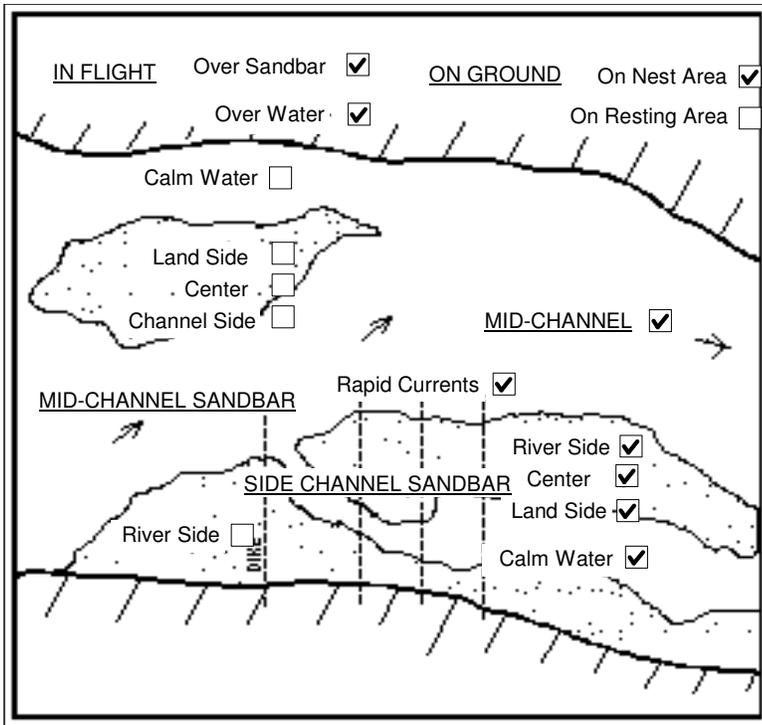
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows/Cottonwoods
Distance: 800 Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: W 8 mph
% Cloud: 90



OTHER NOTES:

Right Bank. Colony located in chute behind Yucatan Dikes and Middle Ground Island. Very high, undulating, sand bar with gravel patches in center. Nests located in high center of bar. No disturbance noted. Three Black Terns present.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 22.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 12:40 RIVER MILE 403.0

LOCALITY: Claiborne MS COUNTY/PARISH STATE SITE NAME: Coffee Point Dikes

WHERE SITED: Latitude: NA Longitude: NA

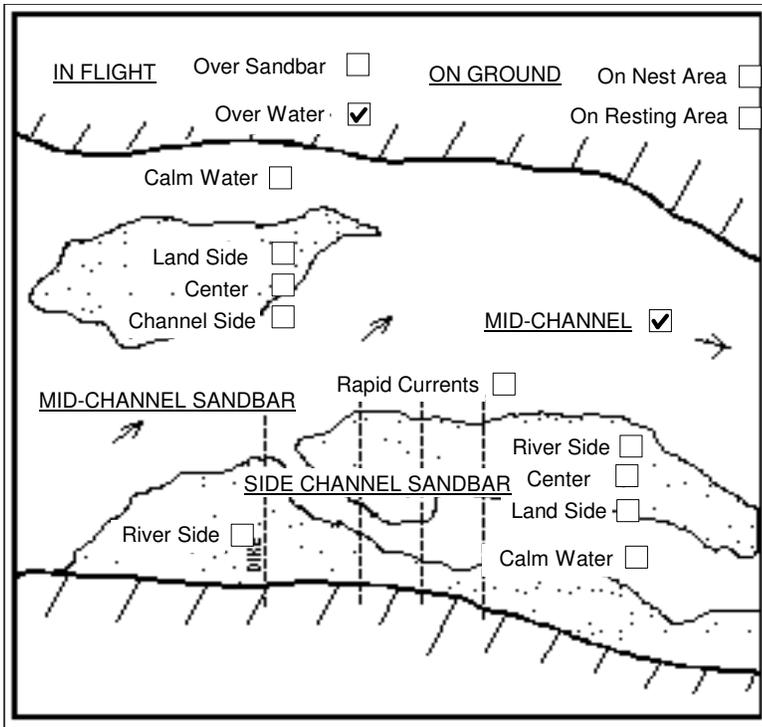
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
 Adults: 1
 Juveniles: _____
 Eggs: _____
 Nests: 0
 Chicks: No

SUBSTRATE:
 Sand:
 Gravel:
 Debris:

VEGETATION:
 Type: _____
 Distance: _____ Feet

FIELD CONDITION:
 Temperature: 85 °F
 Rain: No
 Wind: W 5 mph
 % Cloud: 90



OTHER NOTES:
 One tern fishing mid-channel.

 _____ LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 22.5 F
 (Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 12:55 RIVER MILE 392.2

LOCALITY: Claiborne MS COUNTY/Parish State SITE NAME: Dondurant Towhead Dikes

WHERE SITED: Latitude: NA Longitude: NA

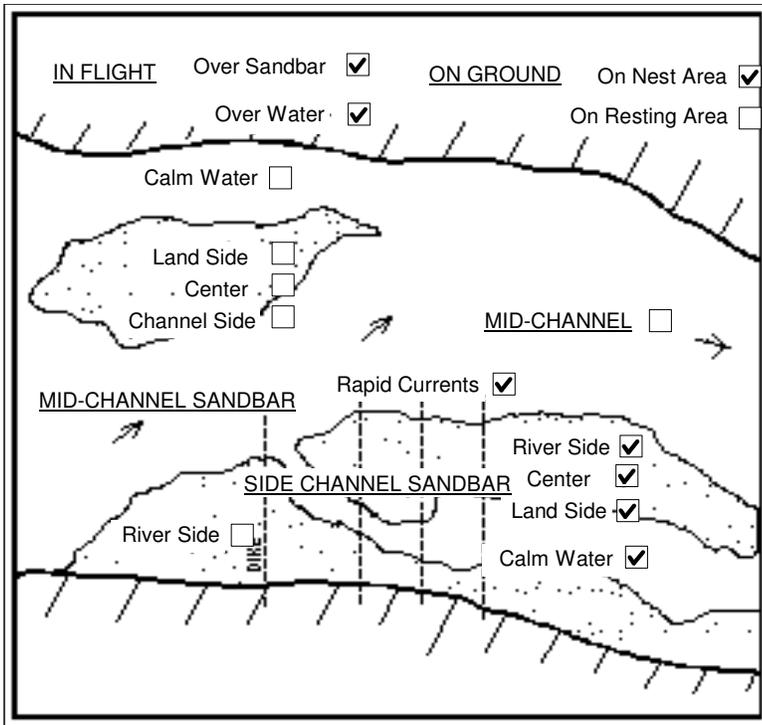
Approximate Distance to Water: 700 Feet

NUMBERS SIGHTED:
Adults: 225
Juveniles: _____
Eggs: 1(1)
Nests: 5
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 89 °F
Rain: No
Wind: W 5 mph
% Cloud: 100



OTHER NOTES:

Right Bank. High, flat, mid-sized (1200 x 800 ft.) sand bar upstream from wooded island. Many juveniles at the waterline with 5 adults sitting inland on nests. No signs of disturbance. One Black Tern, 2 Caspian Terns and many Mississippi Kites and Turkey Vultures in vicinity.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Vicksburg = 22.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 14:11 RIVER MILE 383.0

LOCALITY: Jefferson MS SITE NAME: Spithead Towhead Dikes
County/Parish State

WHERE SITED: Latitude: 31.83712
Longitude: 91.34592

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 98
Juveniles: Yes
Eggs: 1(1) 9(2) 19(3)
Nests: 19
Chicks: Yes

SUBSTRATE:

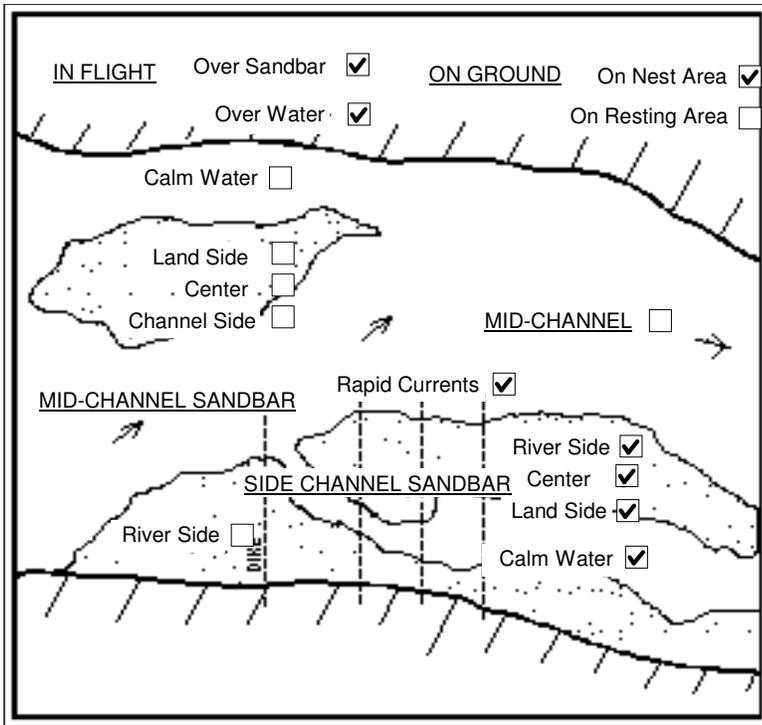
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 800 Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: W 8-10
% Cloud: 100



OTHER NOTES:

Left Bank. Medium sized sand bar (900 x 300 ft.) unattached downstream from larger bar. Terns sitting inland on 19 nests and utilizing all sides.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Natchez = 31.2 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 7/31/2008 TIME OF DAY: 14:35 RIVER MILE 378.5

LOCALITY: Tensas LA SITE NAME: Waterproof Dikes
County/Parish State

WHERE SITED: Latitude: 31.7604
Longitude: 91.3708

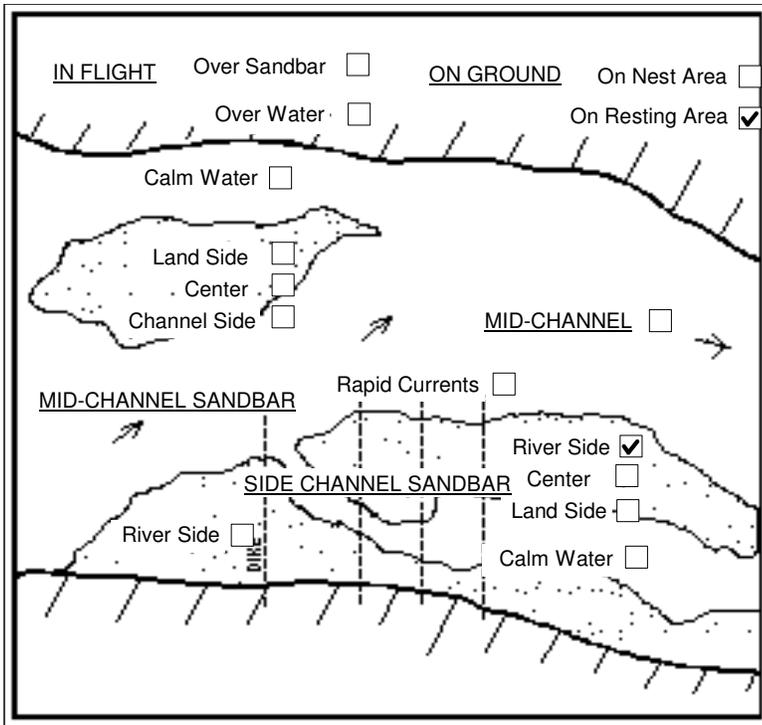
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 43
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 86 °F
Rain: No
Wind: W 10 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Attached sand bar (1/2 mile x 1800 ft.) with all birds resting at waterline. No signs of disturbance. Thousands of Cliff Swallows and 25 Black Terns in vicinity. Rain imminent.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, Rumancik

RIVER GAGE READING: Natchez = 31.2 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 9:30 RIVER MILE 357.0

LOCALITY: Adams MS SITE NAME: Carthage Point Dikes
County/Parish State

WHERE SITED: Latitude: 31.51529
Longitude: 91.49665

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 111
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

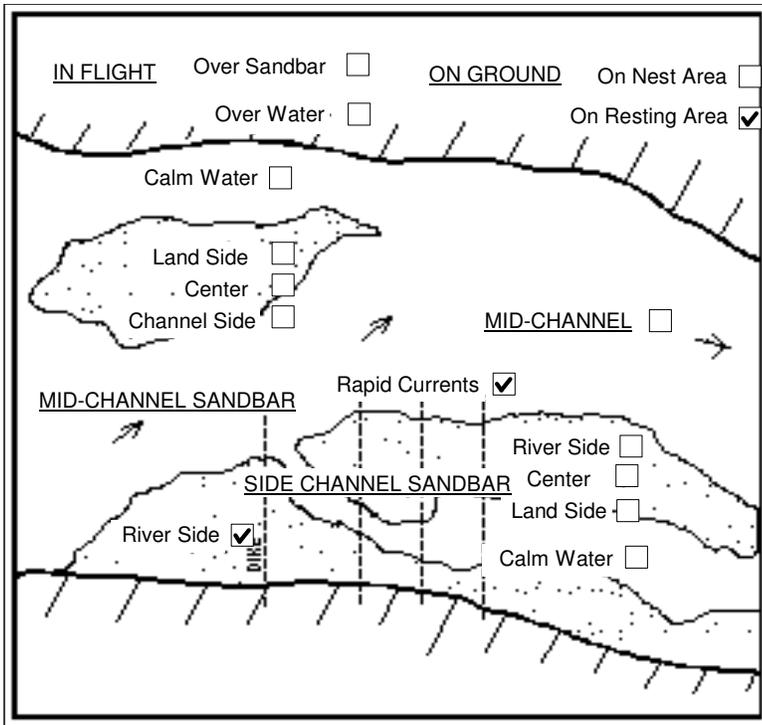
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows
Distance: 300 Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: SW 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Small, attached sand bar upstream from wooded island. No disturbance factors. One Caspian Tern at downstream point with hundreds of Roug-Wing Swallows on bar.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 9:48 RIVER MILE 352.0

LOCALITY: Adams MS SITE NAME: Opposite Warnicott Landing Dikes
County/Parish State

WHERE SITED: Latitude: 31.419
Longitude: 91.4927

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 53
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

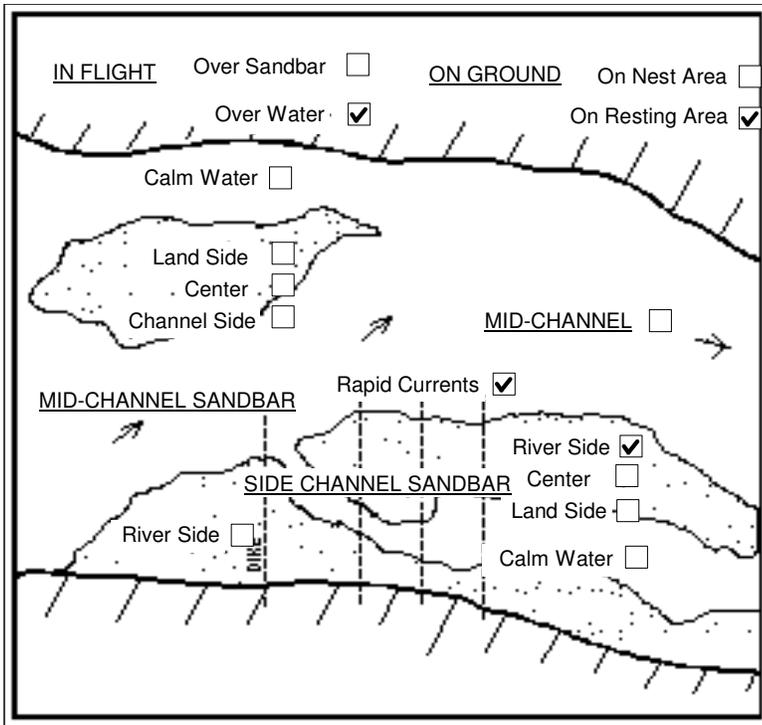
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: SW 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Large, attached sand bar with all birds resting at waterline. Coyote and goose tracks within colony.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 10:15 RIVER MILE 346.5

LOCALITY: Adams MS SITE NAME: Opposite Esperance Point Dikes
County/Parish State

WHERE SITED: Latitude: 31.3937
Longitude: 91.4675

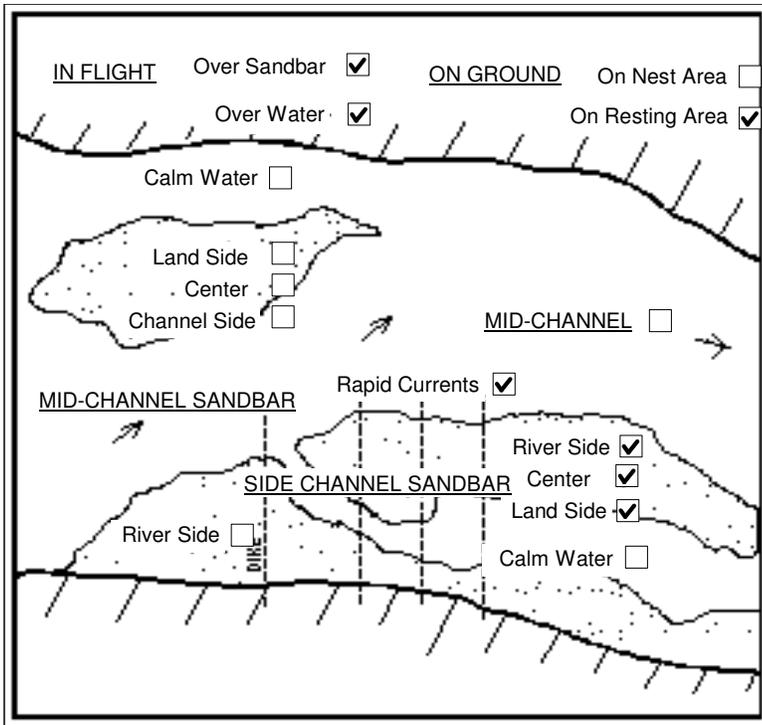
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 27
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: Cottonwoods/grass
Distance: 400 Feet

FIELD CONDITION:
Temperature: 82 °F
Rain: No
Wind: SW 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Small, attached, low (4ft.) sand and mud bar. Resting only. No tracks or disturbance factors noted. One Spotted Sand Piper, 1 Great Egret present.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 10:49 RIVER MILE 329.0

LOCALITY: Adams MS SITE NAME: Jackson Point
County/Parish State

WHERE SITED: Latitude: 31.2408
Longitude: 91.6484

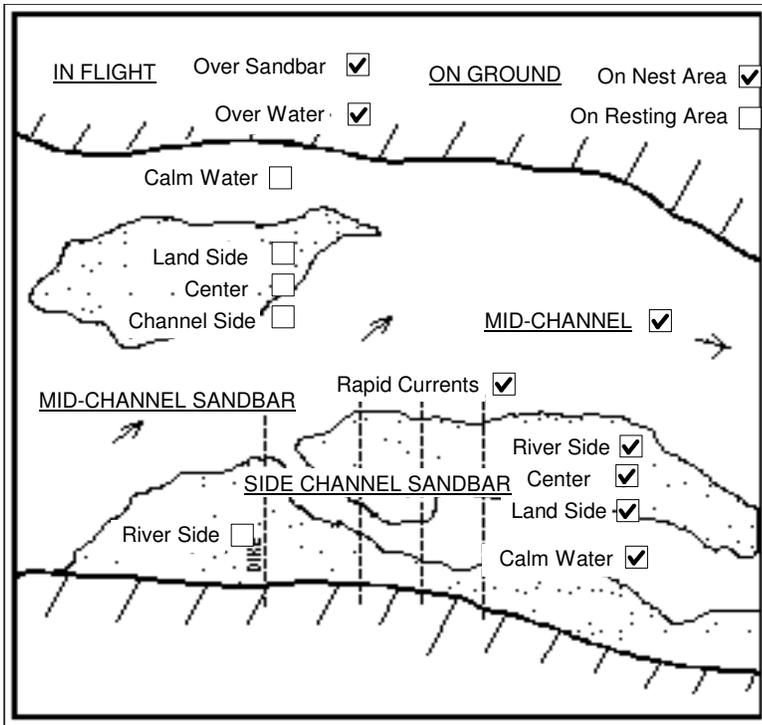
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 46
Juveniles: Yes
Eggs: _____
Nests: 0
Chicks: Yes

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 84 °F
Rain: No
Wind: SW 5 mph
% Cloud: 50



OTHER NOTES:

Left Bank. Mid-channel, isolated point bar, unattached, clean sand, 3-5 ft. high. Juveniles present. No signs of disturbance. One Little Blue Heron and 13 White Ibis just downstream (7 Ibis were observed in 2007 at same location). Two Black Terns flying mid-channel.

MS side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 11:10 RIVER MILE 322.0

LOCALITY: Concordia LA SITE NAME: Homochito Cutoff
County/Parish State

WHERE SITED: Latitude: 31.1742
Longitude: 91.5947

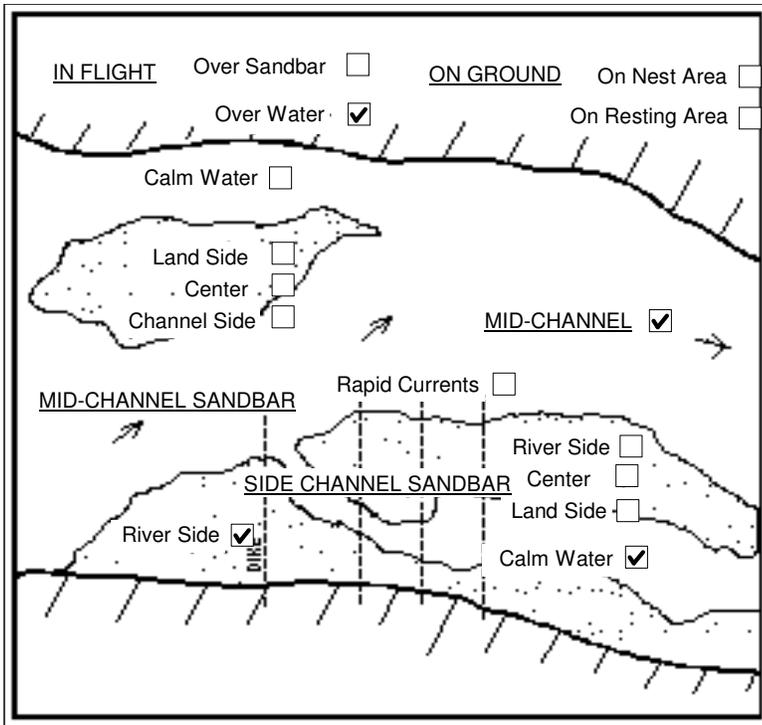
Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:
Adults: 3
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:
Sand:
Gravel:
Debris:

VEGETATION:
Type: _____
Distance: _____ Feet

FIELD CONDITION:
Temperature: 85 °F
Rain: No
Wind: SW 5 mph
% Cloud: 50



OTHER NOTES:

Right Bank. Riverside sand bar (5 ft. elev.) behind Island in Homochito Cutoff. Three adults in transit.

LA side

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

**FIELD SIGHTING
DATA SHEET**

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 11:53 RIVER MILE 305.0

LOCALITY: West Feliciana LA SITE NAME: Shreves Bar Upper
County/Parish State

WHERE SITED: Latitude: 30.9960
Longitude: 91.6441

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 14
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

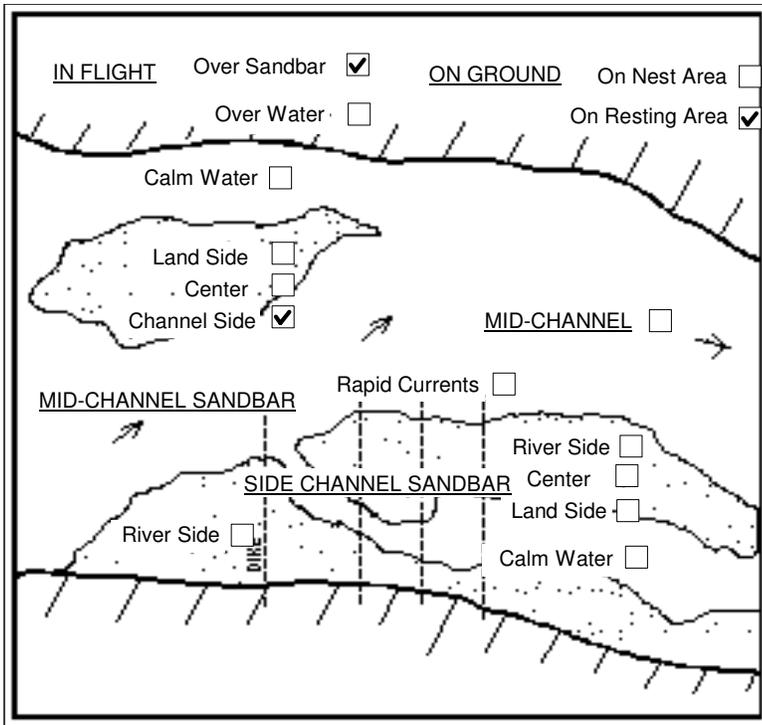
Sand:
Gravel:
Debris:

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: SW 5 mph
% Cloud: 90



OTHER NOTES:

Left Bank. Attached, upstream point of large island. Medium high bar with all birds resting at waterline.
No tracks or signs of predation.

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 11:50 RIVER MILE 304.0

LOCALITY: West Feliciana LA SITE NAME: Shreves Bar Lower
County/Parish State

WHERE SITED: Latitude: 30.9916
Longitude: 91.6507

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 57
Juveniles: _____
Eggs: 4(2)
Nests: 5
Chicks: No

SUBSTRATE:

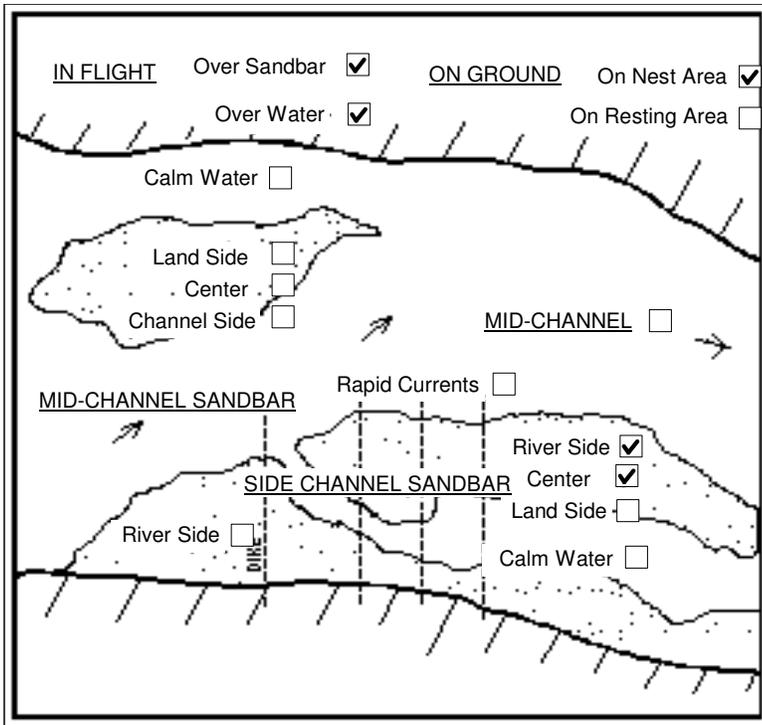
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows/Cottonwoods
Distance: 700 Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: SW 5 mph
% Cloud: 90



OTHER NOTES:

Left Bank. Attached, downstream point of same island previous colony. High, flat, medium size (900 x 1600 ft.) sand bar with terns sitting on scrapes along weak wrack line of fine debris. No disturbance noted. One Black Tern in vicinity.

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)

FIELD SIGHTING
DATA SHEET

FLY BOAT

SPECIES: Interior Least Tern (*Sternula antillarum athalassos*)

DATE: 8/1/2008 TIME OF DAY: 12:14 RIVER MILE 300.5

LOCALITY: West Feliciana LA SITE NAME: Hog Point Dikes
County/Parish State

WHERE SITED: Latitude: 30.93585
Longitude: 91.6458

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 75
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

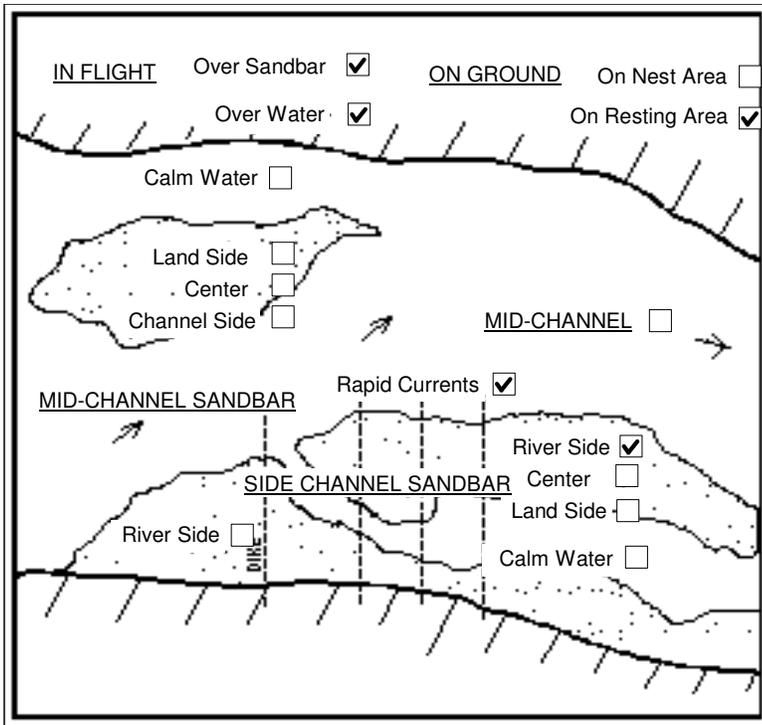
Sand:
Gravel:
Debris:

VEGETATION:

Type: Willows/grass
Distance: 200 Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: SW 5 mph
% Cloud: 90



OTHER NOTES:

Left Bank. Attached, upstream point of wooded island with large, open back chute. All terns resting at waterline. Seventeen Black Terns, 8 Forster's Terns and 1 Kildeer sharing bar. No signs of disturbance.

OBSERVERS: Boyd, Campen, Davin, Fowlkes, K. Jones, W. Jones, Rumancik

RIVER GAGE READING: Natchez = 30.5 F
(Gage Location) (Elevation)