

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

2005

By

Kenneth H. Jones  
Associate Professor of Biology

Dyersburg State Community College  
1510 Lake Road  
Dyersburg, Tennessee 38024

Under Contract with URS Corporation

June - July 2005

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On and between June 24 and July 9, 2005, Kenneth H. Jones, Associate Professor of Biology at Dyersburg State Community College, under contract with URS Corporation, conducted a survey of interior Least Tern (*Sterna 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 21st 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. The extra survey time and expense, plus the belief that the coastal least tern population might overlap the interior population further south, warranted stopping the survey at Vicksburg.

Recent cooperative initiatives by the Corps of Engineers with state resource agencies and the U.S. Fish and Wildlife Service from each of the five states along the lower Mississippi River developed into Mississippi river habitat restoration meetings. These meetings, chaired by the Lower Mississippi River Conservation Committee, thoroughly reviewed various ways that the Corps could assist the states in constructing diverse habitat structures in the river plus restore lost river fishery habitat by opening old, silted-in river channels. Many navigation safety, hydraulic, and biology aspects were discussed as each proposed habitat restoration project site was reviewed at a state meeting. It was evident there were no least tern data below Vicksburg. As a result, all agreed that we needed to know where the tern colonies are downstream of Vicksburg so this data can be incorporated into the overall restoration plans for each state and the river. The Corps was asked to extend the survey reach to thoroughly document Least Tern use.

The Corps agreed with this and said that beginning in 2004 the survey range would be extended an additional 200 miles to Baton Rouge, Louisiana, as this was the southern limit of the sandbars. The Corps suggested the extended reach be surveyed for at least 3 years to ensure maximum survey coverage. Thus, the 2005 interior least tern survey extended 777 miles from Cape Girardeau, Missouri to Baton Rouge, Louisiana, as did last year's 2004 survey.

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 Dyersburg State Community College and Kenneth Jones, Associate Professor of Biology. Observers and crew members of this year's survey included John Rumancik, Larry Marcy, and Mike Thron, all biologists with the Army Corps of Engineers and experienced counters from past surveys, Zack Fowlkes, Wanda Jones, and Richard Ford. Other observers and crew members in 2005 included Robert Thomas, Dennis Davin, Mark Campen and Andrea Carpenter. Casey Lott, American Bird Conservancy, assisted the first two days.

This year's survey yielded a total count of 10,960 Least Terns and 88 nesting colonies, more colonies than have ever previously been recorded, and the second highest number of Least Terns since the surveys were initiated (the 2004 survey recorded 11,239 Least Terns). Seventy-one colonies were identified based on the presence of eggs and/or chicks (Tables 1 and 2). Seventeen 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 colonies were located at Wolf Island Bar (RM 930), Stewart Towhead Dikes (RM 870), Leland Neck Dikes (RM 540), Island #84 Dikes (RM 533), and Opposite Warnicott Landing Dikes (RM 349) with 400 or more terns at each site. The smallest colonies were at Nebraska Point Dikes Lower (RM 807) and Walnut Bent Revetment Dikes (RM 682), with just 12 and 9 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, 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. Twenty egg embryos were collected at 10 sites for later DNA analysis by Dr. Susan Haig (U. S. Fish and Wildlife Permit #TE106221-0) USGS biologist. Also, one adult Tern and 3 chicks were salvaged for DNA from 2 colony sites, reason for mortality, unknown. 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, 61<sup>st</sup> edition, USACE. Data sheets and colony locations are found in Appendix A.

The average number of adult terns per colony was 119, with colony sizes ranging from as little as 9 adults to as many as 700. The numbers of eggs per nest ranged from 1 to 4 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 small boat survey was initiated June 25, 2005, 6 days after the river stage at Memphis, Tennessee crested at 12 ft., preceded by a 10 ft. rise which began on June 9 (Table 3). Normally, the survey would have been postponed in order to give any flooded and displaced colonies a chance to re-establish. However, this year, there was a concerted effort by the American Bird Conservancy to coordinate all Least Tern Monitoring activities within a two-three week time frame. This was to minimize the possibility of different surveys counting the same Least Terns from different areas while terns were still migrating, or recently displaced, looking for optimal breeding habitat. During this 2005 survey the river was exhibiting a slow, continuous fall for every location on the dates surveyed (Table 3). The survey proceeded downstream during daylight hours from Cape Girardeau, Mo., to Baton Rouge, La., at an average pace of 111 miles per day. One section of river, RM 820 to RM 804, was not surveyed due to lightning storms in the area at the time of the survey, however, this section was surveyed two weeks later on July 9, 2005.

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 slowly drift with the current. 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. 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 drifted downstream, usually produced higher counts than just walking on the sand bar to the colony's center to induce mobbing. 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.

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 17 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. The highest number of birds sighted by any one observer was recorded as the total number for the site, but only when at least two observers were within 5% of the same figure. Only in colonies dispersed over ½ mile in length or with back chutes not visible to all observers, were numbers counted by individual observers added together to obtain a total count. Fledged juveniles were noted at only 2 colony sites (Smith Point Dikes, RM 599, and Carthage Point Dikes, RM 357.8). Since it is usually impossible to discriminate between flying juveniles and adults when determining total colony counts at long ranges, the adult counts at these two sites may have included some juveniles, but it is unlikely, due to the early dates of this year's survey, that a similar scenario occurred elsewhere. 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 from 30 to 200, 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. Ten Thousand nine hundred sixty (10,960) Least Terns were recorded at 118 locations (Table 1, Figure 1). Of these, 88 sites were identified as nesting colonies with 10,502 adults, 22 sites as resting bars only with 407 adults, and 8 observations were of 51 birds that could not be associated with colonies, either flying over feeding areas or in transit along the river. Of the identified nest colonies, 63 had eggs and/or chicks present, 25 had neither chicks nor eggs, 2 had chicks but no eggs, 34 had eggs but no chicks, and 27 had both chicks and eggs present within the colony. Interestingly enough, a colony with 35 adults surveyed on June 26 at the Bend of Island #25, RM 802.5 (Appendix-II-33) may have moved 1.5 miles upstream to a new site, Island #25 Dikes, RM 804 (Appendix-II-32), which was surveyed on July 9 with a total count of 36 birds.

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. Most of the sand and gravel bars containing colonies were associated with dike fields, however 15 were located on bars away from dikes, either on the outside of bends, below large islands or more often point bars on the inside of bends without dikes. As before, the least likely sandbars to be utilized by nesting terns were those that were directly attached to the riverbank. Only 9 colonies met this criterion, and their immense size provided some isolation.

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 20 to 1,000 feet and averaged ~300 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 73 colony sites, but 15 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.

Predation on terns, their eggs or chicks was noted at 9 colony sites. Coyotes were considered responsible for those instances as their tracks wandered from scrape to scrape, often leaving egg shell fragments behind as evidence. The presence of coyote or dog tracks was noted at 26 sites and still lends strong support to the contention that coyotes and/or feral dogs are one of the more common predation threats to nesting Least Terns along the Lower Mississippi River. Of 88 colonies, 15 had evidence of recent intrusion by humans on foot, using boats, ATVs, or in one case, full size vehicles, to access the sites. However, unlike some previous surveys, no human vandalism was noted at any colony in 2005.

Besides Coyotes (*Canis latrans*), other potential predators, or their sign, seen near colonies during this year's survey included Bobcat (*Lynx rufus*), Raccoon (*Procyon lotor*), snakes (*Serpentes*), Great Blue Heron (*Ardea herodias*), Egrets (*Casmerodius*, *Egretta*, *Bubulcus*), American Crow (*Corvus brachyrhynchos*), Turkey Vulture (*Cathartes aura*), Black Vulture (*Coragyps atratus*), Mississippi Kite (*Ictinia mississippiensis*), Osprey (*Pandion haliaetus*), and Bald Eagle (*Haliaeetus leucocephalus*).

Interesting raptor evasion behavior was observed at Island #84 Dikes (Appendix – II – 84) by Least Terns in response to a perceived threat. While observers were walking across the bar and being mobbed by terns, one observer whistled, imitating the call of a Red-tailed Hawk. Immediately all terns went silent, mobbing ceased, and the entire flock dove low to the ground and out over the water in a concerted avoidance maneuver. Almost immediately the flock returned to resume mobbing, but a similar response was obtained twice more using the same stimulus. Presumably the silence would allow the terns to better locate the source of the attack, and their low flight over the water would make an attack from above less likely to be successful.

Other bird species observed on the sand bars or in close proximity to Least Tern colonies included White Pelican (*Pelecanus erythrorhynchos*), Anhinga (*Anhinga anhinga*), Double-Crested Cormorant (*Phalacrocorax auritus*), Little Blue Heron (*Egretta caerulea*), Cattle Egret (*Bubulcus ibis*), Snowy egret (*Egretta thula*), Great Egret (*Casmerodius albus*), Great Blue Heron (*Ardea herodias*), White Ibis (*Eudocius albus*), Canada Goose (*Branta canadensis*), Mallard Duck (*Anas platyrhynchos*), Wood Duck (*Aix sponsa*), Killdeer (*Charadrius vociferous*), Spotted Sandpiper (*Actitis macularia*), Herring Gull (*Larus argentatus*), Caspian Tern (*Sterna caspia*), Red-tailed Hawk (*Buteo jamaicensis*), Rock dove (*Columba livia*), Mourning Dove (*Zenaida macroura*), Eastern Kingbird (*Tyrannus tyrannus*), Tree Swallow (*Tachycineta bicolor*), Purple Martin (*Progne subis*), Rough-winged Swallow (*Stelgidopteryx serripennis*), Cliff Swallow (*Hirundo Pyrrhonota*), Barn Swallow (*Hirundo rustica*), Prothonotary Warbler (*Protonotaria citrea*), Indigo Bunting (*Passerina cyanea*), Red-winged Blackbird (*Agelaius phoeniceus*), and Common Grackle (*Quiscalus quiscula*).

Fingerling size fish of Gizzard Shad (*Dorosoma cepedianum*), Threadfin Shad (*Dorosoma petenense*), Striped Bass (*Morone saxatilis*), Largemouth Bass (*Micropterus salmoides*), and sunfish (*Centrarchidae*) were found at multiple colonies and are presumed to have been dropped by foraging adults.

This year's survey was only the second to cover the additional 200 river miles below Vicksburg, Mississippi, and though the total number of Least Terns counted was down by a few hundred (279) from the 2004 census, the number of colony sites actually increased from 69 in 2004 to 88 in 2005.

Table 1: Least Tern Survey - June 25-July 9, 2005 - Mississippi River  
Cape Girardeau, Missouri, to Baton Rouge, Louisiana

<b>River Mile</b>	<b>Mississippi River Location</b>	<b>State</b>	<b>Lat. N</b>	<b>Long. W</b>	<b>Least Terns</b>			<b>Nests</b>
UR 39.5	Burnham Island	ILL			1		0	
UR 35.5	Goose Island	ILL			5		0	
UR 33.0	Billings Island	MO			14		0	
UR 30.4	Bumgard Island	ILL	37.0446	89.3795	72	c*	7	
946.0	Island #1 Dikes	KY	36.8899	89.1171	44	c*	3	
940.0	Below Campbell Dikes	KY	36.8013	89.1311	11		0	
930.5	Wolf Island Bar	KY	36.6884	89.1479	505	c*	22	
920.5	Hickman Bend	MO	36.5692	89.2374	192	c*	14	
908.0	Island #6	KY	36.5475	89.3989	6		0	
894.0	Hotchkiss Bend Dikes	MO	36.5179	89.4673	29	*	0	
887.5	Kentucky Point Dikes Upper	KY	36.6653	89.5460	21	*	7	
884.0	Kentucky Point Dikes Lower	KY	36.5199	89.5028	140	c*	8	
880.5	Island #11 Dikes	MO	36.4721	89.5230	60	c*	3	
876.0	Marr Towhead	TN	36.4184	89.5363	30	c*	2	
871.5	Stewart Towhead Dikes Upper	MO	36.3529	89.5274	144	c*	3	
870.0	Stewart Towhead Dikes Lower	MO	36.3447	89.5297	420	c*	26	
864	Below Cherokee Dikes	TN	36.3241	89.6107	60	c*	5	
860.5	Little Cypress Bend Revetment	MO			4		0	
857.2	Chute of Island #14	MO	36.2461	89.5781	156	c*	5	
853.0	Robinson Bayou Dikes	MO			13		0	
846.0	Caruthersville Dikes	TN			48	*	0	
836.0	Island #18 Towhead Dikes	TN	36.0908	89.6683	270	c*	15	
830.5	Island #20 Dikes Upper	MO	36.0387	89.6932	7		0	
827.0	Head of Island #21 Dikes	TN			4		0	
825.5	Island #21	TN	35.9624	89.7101	102	c*	10	
819.5	Wrights Point Dikes Upper	AR	35.9086	89.6470	22	c*	0	
815.0	Wrights Point Dikes Lower	AR			10		0	
811.5	Below Tamm Bend Dikes Upper	TN	35.9077	89.7404	29	c*	8	
810.0	Below Tamm Bend Dikes Lower	TN	35.8973	89.7557	19	c*	1	
807.7	Nebraska Point Dikes Upper	TN	35.8719	89.7663	21	c*	1	
806.8	Nebraska Point Dikes Lower	TN	35.8553	89.7492	12	c*	1	
804.0	Island #25 Dikes	AR	35.8350	89.7065	36	c*	0	

**SUBTOTAL**

**2,507**

Table 1 continued: Least Tern Survey - June 25-July 9, 2005 - Mississippi River  
Cape Girardeau, MO, to Baton Rouge, LA

<b>River</b>						<b>Least</b>	
<b>Mile</b>	<b>Mississippi River Location</b>	<b>State</b>	<b>Lat. N</b>	<b>Long. W</b>	<b>Terns</b>	<b>Nests</b>	
802.5	Bend of Island #25	AR	35.8171	89.7045	35	c*	7
771.0	Randolph	TN	35.5283	89.8987	52	c*	1
766.5	Bel. Richardson Landing Dikes	TN			16		0
760.0	Cedar Point	TN	35.4416	90.0064	7		0
755.0	Densford Bar	TN	35.3902	90.0703	230	c*	16
740.5	Loosahatchie Bar Dikes	TN	35.2074	90.0730	92	c*	3
733.0	Engineer Bar Dikes	AR	35.1236	90.1031	117	c*	4
729.0	Vice Presidents Island #46	TN	35.1161	90.1714	62	c*	5
725.0	Dismal Point Dikes	AR	35.0650	90.1942	14	*	0
716.5	Cow Island Bend	MS	35.0117	90.2925	300	c*	16
707.0	Cat Island	AR	34.9051	90.2582	1		0
705.0	Seypell Dikes	AR	34.8969	90.2603	72	c*	3
703	Pickett Dikes	MS	34.8761	90.3078	115	c*	4
701.0	Porter Lake Dikes Upper	AR	34.8583	90.3492	82	c*	7
700.0	Porter Lake Dikes Lower	AR	34.8406	90.3761	25	c*	2
694.0	Commerce Dikes	MS	34.8150	90.4564	106	c*	2
687	Mhoon Bend	AR	34.7304	90.4664	105	c*	1
681.7	Walnut Bend Revetment Dikes	AR	34.745	90.5453	9	c*	1
680.0	Bordeaux Point Dikes	MS	34.7300	90.5656	64		0
676.5	Below Walnut Bend Dikes	AR	34.6742	90.5752	41		0
672.0	St. Francis Bend	MS	34.6241	90.5835	211	c*	30
667.5	Prairie Point Dikes	AR	34.5625	90.5536	57	c*	1
655.3	Montezuma Towhead Dikes	AR	34.4106	90.5911	24		0
650.2	Friars Point Dikes	MS	34.3769	90.6631	41	c*	7
647.0	Kangaroo Point Dikes	AR	34.3661	90.7297	72	c*	6
643.4	Old Town Bend	MS	34.3485	90.7658	74	c*	5
640.0	Island #62 Dikes Upper	AR	34.3064	90.7400	14	c*	1
637.0	Island #62 Dikes Lower	AR	34.2764	90.7669	34	c*	5
629.3	Island #64 Dikes	AR	34.2203	90.8483	34	c*	4
624.8	Sunflower Cut-Off	AR	34.1725	90.8997	83	c*	7
623.0	Below Ludlow Dikes	AR	34.1583	90.9303	11		0
619.9	Island #67 Dikes Upper	MS	34.1150	90.9490	156	c*	5

**SUBTOTAL**

**2,356**

Table 1 continued: Least Tern Survey - June 25-July 9, 2005 - Mississippi River  
Cape Girardeau, MO, to Baton Rouge, LA

<b>River</b>						<b>Least</b>	
<b>Mile</b>	<b>Mississippi River Location</b>	<b>State</b>	<b>Lat. N</b>	<b>Long. W</b>	<b>Terns</b>		<b>Nests</b>
619.0	Island #67 Dikes Lower	MS			90	c*	30
616.0	Below Knowlton Dikes Upper	AR			8		0
612.5	Below Knowlton Dikes	AR	34.0292	90.8982	225	c*	35
611	Below Knowlton Dikes Lower	AR			25	*	4
608.2	Island #70 Dikes	MS	34.0233	90.9667	328	c*	113
603.0	Henrico Dikes	MS	33.9898	91.0500	37		0
599.0	Smith Point Dikes	MS	33.9571	91.0798	92	c*	15
595.0	Victoria Bend Dikes	AR	33.9295	91.0186	369	c*	119
589.0	Terrene Dikes Upper	MS	33.8415	91.0632	44	*	8
587.5	Terrene Dikes Lower	MS	33.8333	91.0500	47	*	10
583.5	Malone Field Dikes	AR	33.7860	91.0517	84	*	9
578.0	Below Prentiss Dikes	MS	33.7502	91.1336	89	*	9
573.5	Caulk Neck Cut-Off	AR	33.7087	91.1706	67		0
569.5	Catfish Point Dikes	MS	33.6781	91.2242	72	*	5
564.0	Chicot Landing Dikes	AR	33.6275	91.1498	69	*	2
558.0	Choctaw Bend	AR	33.5797	91.1697	43	*	3
550.0	Ashbrook Cutoff Dikes	MS	33.5192	91.1914	210	c*	12
541.5	Tarpley Cutoff Dikes	MS	33.4156	91.1203	57	c*	7
540.0	Leland Neck Dikes	MS	33.3992	91.1083	528	c*	200
533.0	Island #84 Dikes	MS	33.3089	91.1764	700	c*	22
529	Refuge Dikes	MS	33.2664	91.1222	170	c*	2
520.7	Island #86 Dikes	AR	33.1600	91.0875	8		0
518.1	Kentucky Bend Bar Upper	MS	33.1403	91.0899	62	c*	10
517.5	Kentucky Bend Bar Lower	MS	33.1214	91.1011	38	*	8
514.0	Leota Dikes	MS	33.0978	91.1592	61	*	7
510.0	Cracraft Lower Dikes	MS	33.0375	91.1567	49	c*	5
504.0	Corregidor Dikes	MS	32.9645	91.1366	176	*	28
499.0	Wilson Point Dikes	MS			12		0
491.0	Baleshed Landing Dikes	MS	32.8417	91.1278	56	c*	3
487.5	Ben Lommond Dikes Upper	MS	32.8068	91.1423	162	c*	23
485.5	Ben Lommond Dikes Lower	MS	32.775	91.1542	90	c*	30
483.0	Ajax Bar Dikes Upper	MS	32.7597	91.1411	29	c*	2

**SUBTOTAL**

**4,097**

Table 1 continued: Least Tern Survey - June 25-July 9, 2005 - Mississippi River  
Cape Girardeau, MO, to Baton Rouge, LA

River Mile	Mississippi River Location	State	Lat. N	Long. W	Least Terns		Nests
481.6	Ajax Bar Dikes Lower	MS	32.7375	91.1192	40	c*	10
476.6	Point Lookout Dike	LA			6		0
470.5	Arcadia Point Dikes	LA	32.6594	91.1322	13		0
460.4	Willow Cutoff Dikes	LA	32.5361	91.1006	250	c*	100
456.0	Milliken Bend	MS	32.4742	91.1042	67	c*	40
442.5	Brown's Point	MS			2		0
429.5	Below Racetrack Dikes	MS	32.2389	90.9694	225	*	40
419.0	Newton Bend Dikes	LA	32.1367	91.0100	90	*	20
413.6	Togo Island Dikes	LA	32.1072	91.0997	28		0
409.5	Yucatan Dikes	LA	32.0589	91.0628	13		0
402.0	Coffee Point Dikes	LA	31.9900	91.1192	16	c*	2
393.0	Bel. Bondurant Towhead Dikes	LA	31.8978	91.2117	21	*	5
383.2	Below Spithead Towhead Dikes	MS	31.8306	91.3467	187	c*	30
378.0	Water Proof Dikes	LA	31.7604	91.3708	130	*	7
357.8	Carthage Point Dikes	MS	31.5197	91.4103	75	c*	1
349.0	Opp. Warnicott Ldg. Dikes	MS	31.4208	91.4950	554	c*	100
345.0	Esperance Point	LA	31.3580	91.4848	2		0
335.6	Dead Man's Bend	LA	31.2528 ?	91.5653	5		0
329.0	Jackson Point	MS	31.2411	91.6475	18		0
322.0	Homochito Cutoff	LA	31.1742	91.5947	32	c*	2
305.0	Shreves Bar	LA	30.9956	91.6447	49	c*	4
299.5	Hog Point Dikes	LA	30.9347	91.6450	177	c*	13

**SUBTOTAL**

**2,000**

**TOTAL INDIVIDUALS**

**10,960**

**TOTAL SITES**

**118**

**TOTAL COLONIES**

**88**

c Confirmed chicks or eggs

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

Table 2: Summary of 2005 Least Tern Survey on the Lower Mississippi River

River Reach	Number of Terns (June 25-July 9, 2005)
Cape Girardeau, MO, to Cairo, IL URM 50 – RM 954	92
Cairo, IL, to Osceola, AR RM 954 – RM 790	2,450
Osceola, AR, to Helena, AR RM 790 – RM 670	1,721
Helena, AR, to Greenville, MS RM 670 – RM 530	3,784
Greenville, MS, to Vicksburg, MS RM 530 – RM 430	1,291
Vicksburg, MS, to Baton Rouge, LA RM 430 - RM 230	1,622
TOTAL	10,960

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	22
Osceola, AR, to Helena, AR RM 790 – RM 670	15
Helena, AR, to Greenville, MS RM 670 – RM 530	26
Greenville, MS, to Vicksburg, MS RM 530 – RM 430	13
Vicksburg, MS, to Baton Rouge, LA RM 430 - RM 230	11
TOTAL	88

Table 3: Gage Readings – Lower Mississippi River  
Least Tern Surveys – June, July 2005

**Bold numbers** indicate crest in previous river rise.  
**Shaded numbers** indicate stages at time of survey.

Date	Cairo	New Madrid	Caruthersville	Memphis	Helena	Arkansas City	Greenville	Vicksburg	Natchez
June									
10	21.0	10.7	12.4	2.4	8.0	8.6	19.6	13.4	21.7
11	22.4	12.2	14.3	3.3	8.6	8.6	18.8	12.5	20.9
12	22.8	13.5	15.6	5.3	10.0	9.3	19.2	12.0	20.0
13	23.1	16.4	15.9	6.8	11.8	10.4	M	12.4	19.7
14	25.0	15.7	16.7	7.9	13.2	11.6	M	13.3	19.9
15	25.4	16.8	17.6	9.0	14.3	12.7	M	14.5	20.8
16	<b>26.3</b>	15.0	18.2	10.2	15.5	13.7	24.1	15.8	21.9
17	<b>26.3</b>	<b>16.7</b>	18.7	11.0	16.6	14.8	25.3	17.1	23.0
18	26.1	13.6	<b>18.8</b>	11.7	17.4	16.0	26.4	18.5	24.4
19	25.1	12.5	18.5	<b>11.9</b>	17.9	16.8	27.4	19.8	25.7
20	23.8	13.6	17.7	11.6	<b>18.1</b>	17.5	28.2	20.8	27.0
21	22.2	16.2	16.5	10.7	17.8	<b>17.9</b>	28.8	21.7	28.0
22	21.5	15.1	15.4	9.5	16.9	18.1	<b>29.1</b>	22.4	28.6
23	21.1	12.5	14.9	8.1	15.6	17.6	28.9	<b>22.7</b>	29.3
24	19.5	10.8	14.1	7.2	14.5	16.9	28.2	22.6	<b>29.5</b>
25	19.2	10.1	13.1	6.4	13.5	16.2	27.5	22.1	29.3
26	18.8	9.6	12.5	5.4	12.6	15.4	26.7	21.4	28.9
27	18.0	8.2	12.0	4.6	11.6	14.3	25.6	20.5	28.2
28	17.7	8.1	11.3	4.1	10.8	13.5	24.6	19.4	27.4
29	17.7	7.7	11.0	3.4	10.0	12.9	23.9	18.4	26.4
30	17.1	7.4	10.7	2.8	9.3	12.4	23.3	17.6	25.5
July									
1	16.5	6.9	10.2	2.3	8.8	11.9	22.8	16.9	24.6
2	17.9	7.6	10.0	1.9	8.4	11.6	22.4	16.2	24.0
3	17.7	8.0	10.8	1.6	7.9	11.1	21.9	15.8	23.5
4	17.4	7.3	10.5	1.9	7.7	10.2	21.0	15.2	22.9
5	17.6	7.0	10.5	2.3	8.0	9.7	20.2	14.3	22.3
6	16.4	7.8	10.2	2.0	8.2	9.2	19.8	13.5	21.5
7	17.4	8.2	9.8	2.1	8.2	9.3	19.6	12.8	20.7
8	17.5	7.4	10.2	1.5	7.7	9.5	19.7	12.7	20.3
9	17.0	7.0	10.3	1.6	7.0	9.5	19.8	12.7	20.1
10	18.3	8.9	10.3	1.7	7.0	M	M	M	M

Table 4: Summary of Least Tern Surveys – 1985 – 2004  
Lower Mississippi River

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

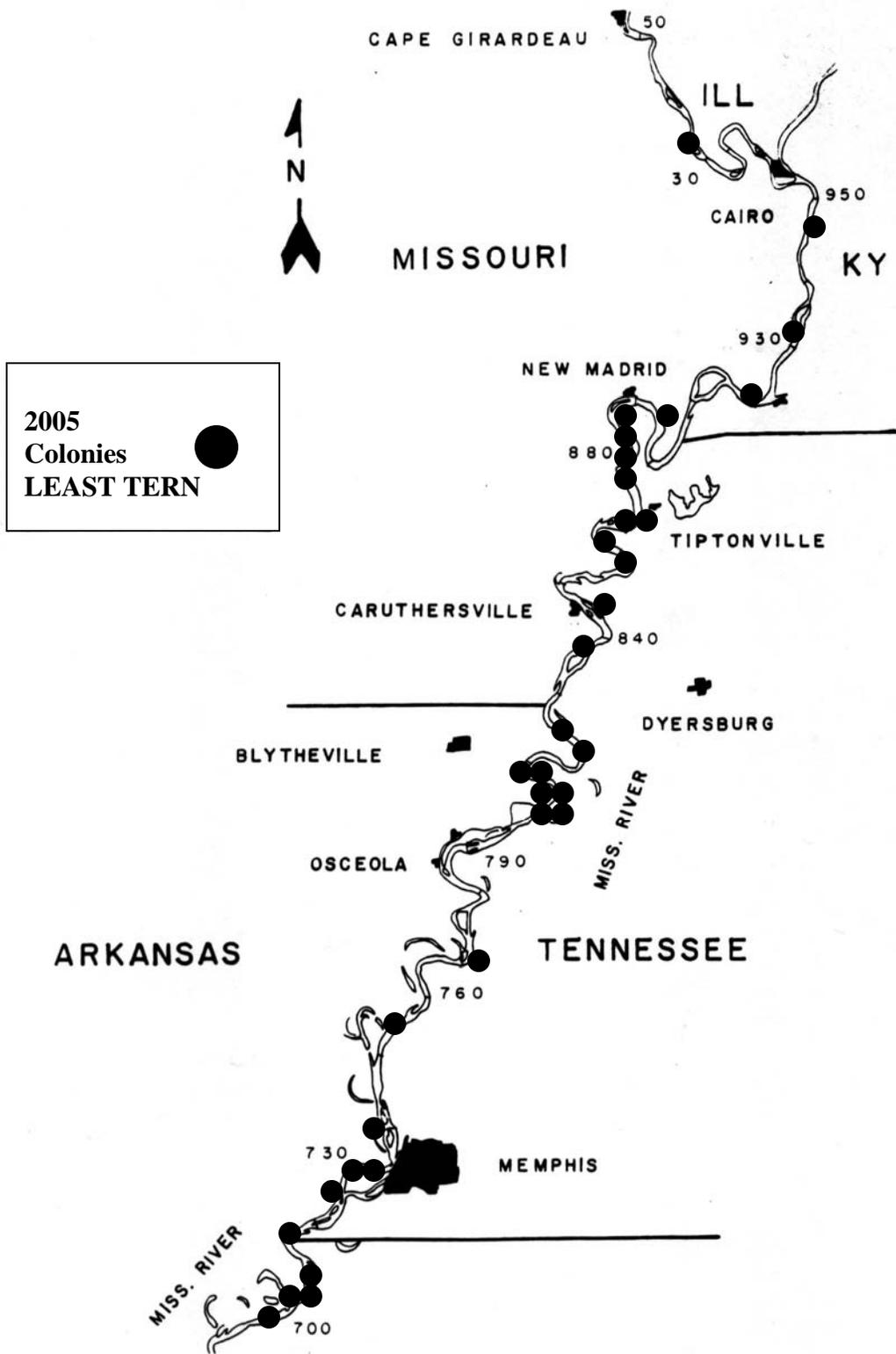


Figure 1: Least Tern Survey – 2005 – Area Map of Nest Colonies on Mississippi River – Cape Girardeau, MO to Baton Rouge, LA

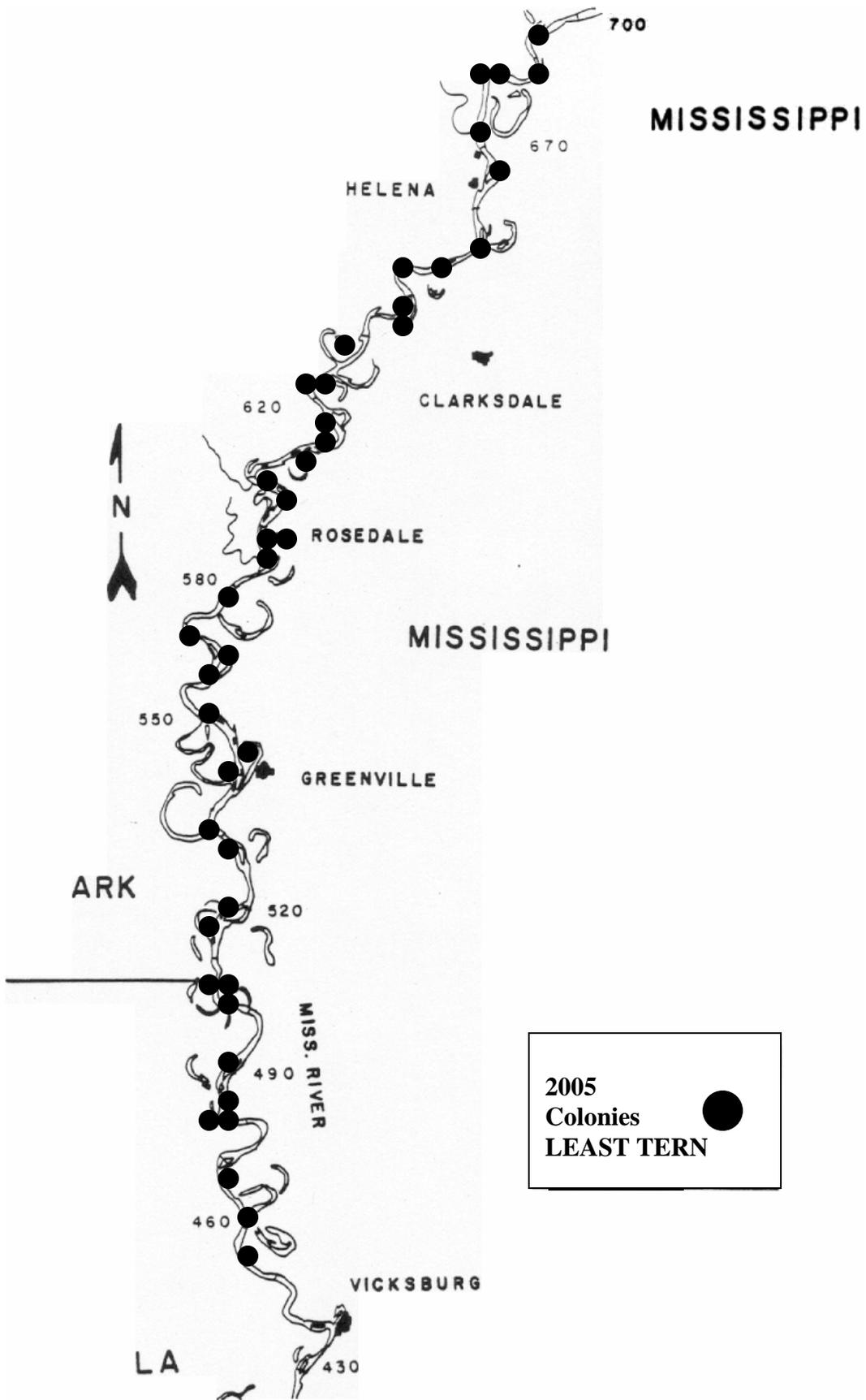


Figure 1 Continued: Area Map of Nest Colonies

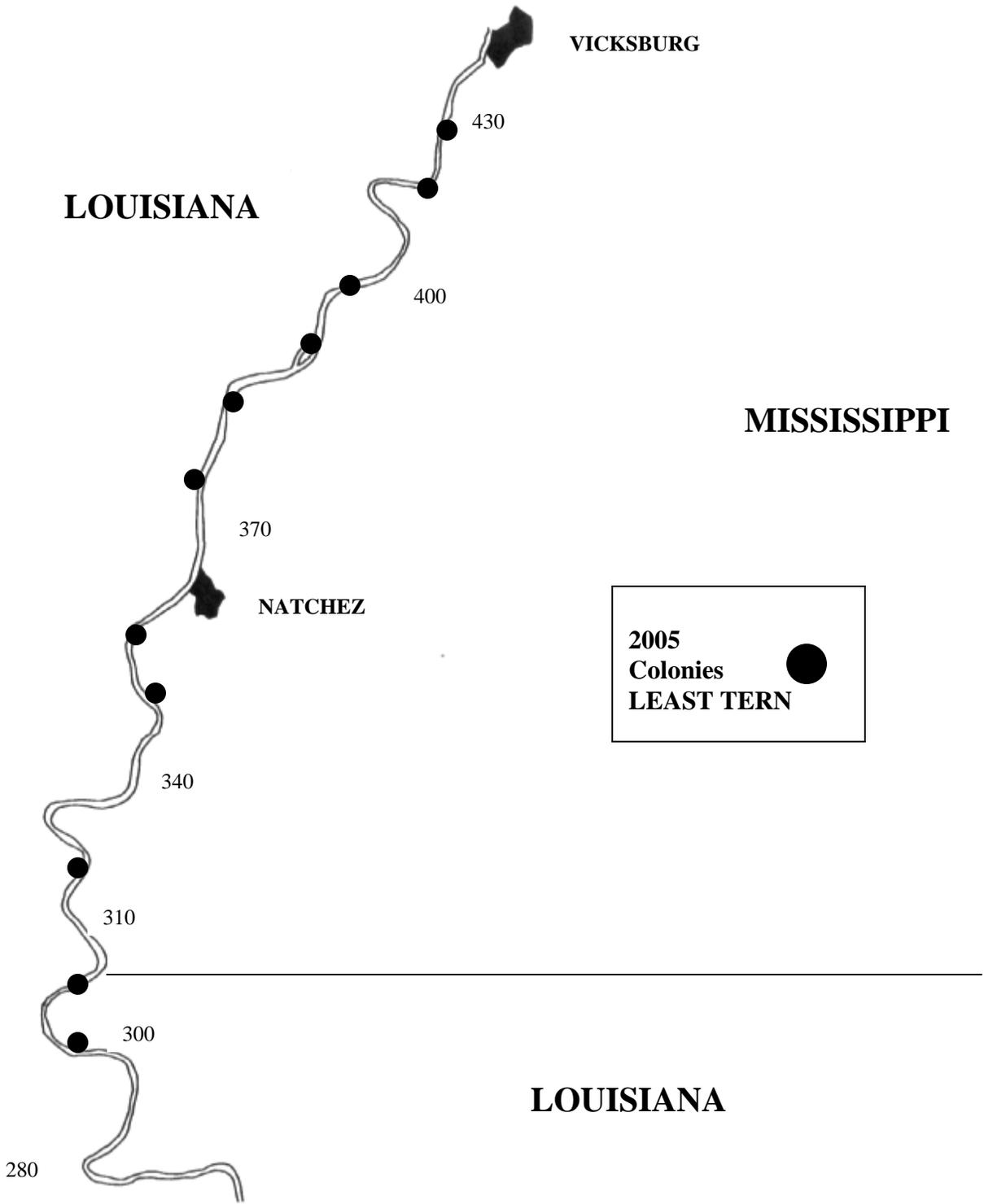


Figure 1 Continued: Area Map of Nest Colonies

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

**2005**

**APPENDIX A**

**APPENDIX A – I**

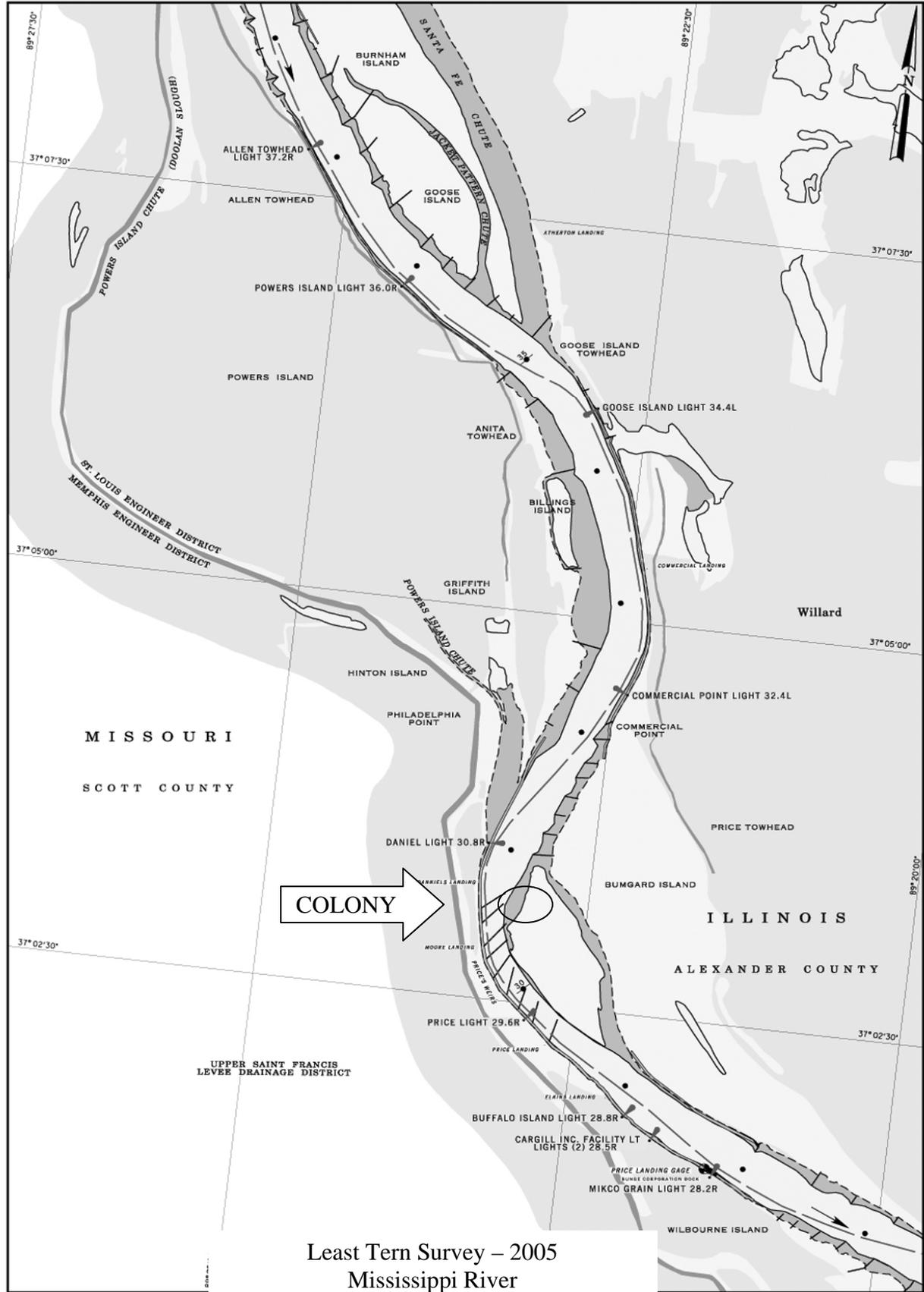
**LEAST TERN SURVEY - 2005**

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

**NEST COLONY LOCATIONS**

**Memphis District, Corps of Engineers**

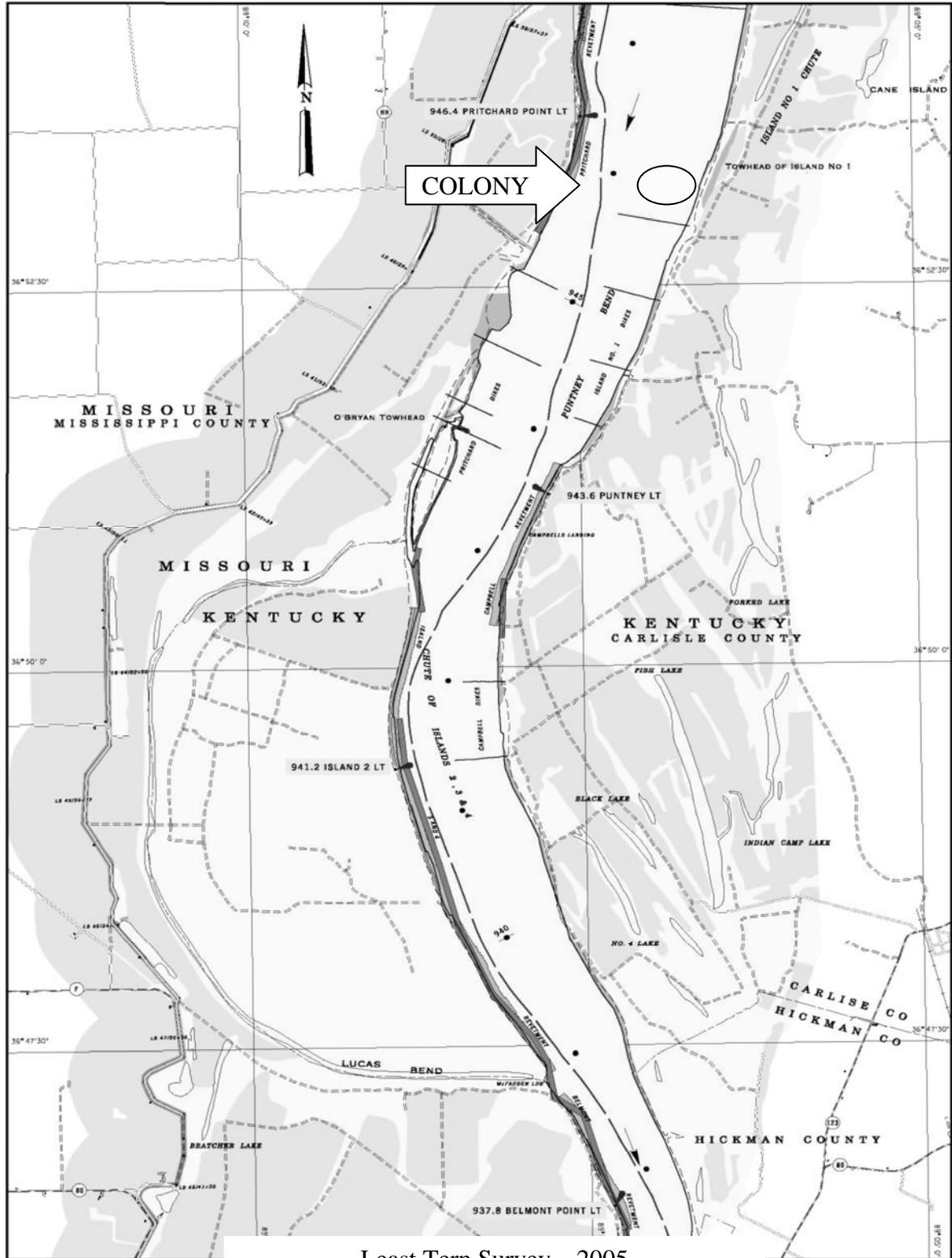
**Maps**



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-1

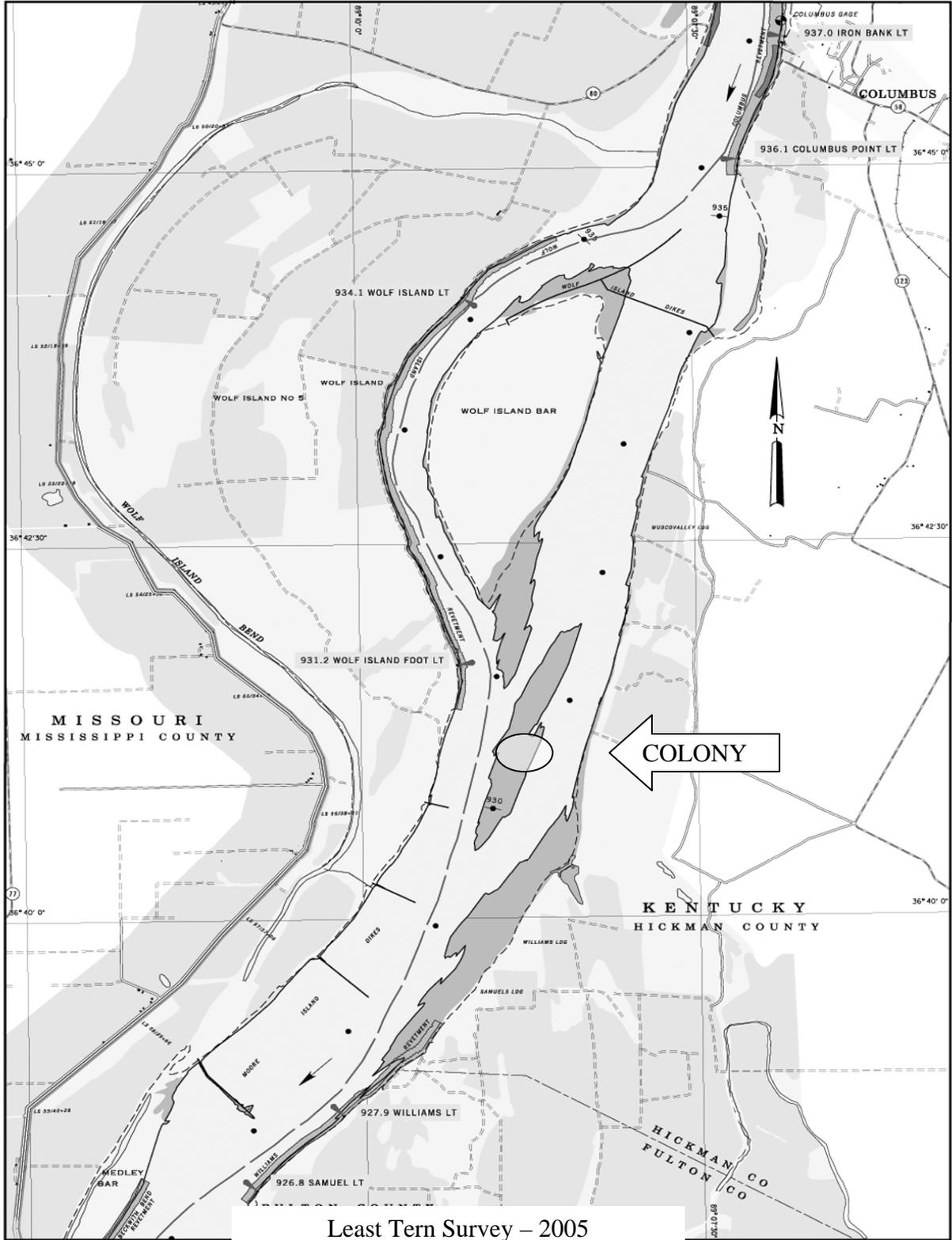
MAP NO. 27



1998

MAP NO. 31

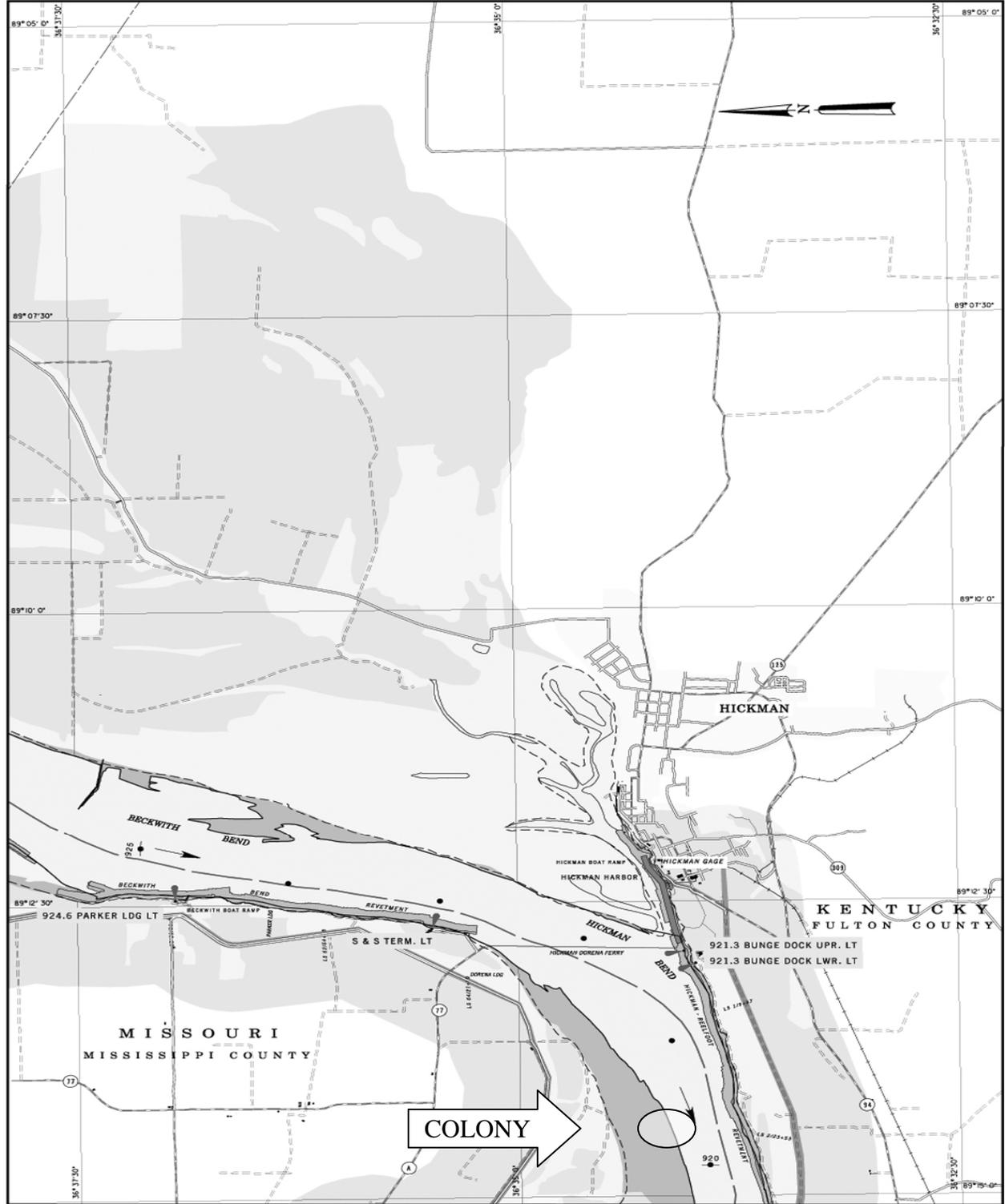
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-2



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-3

MAP NO. 32



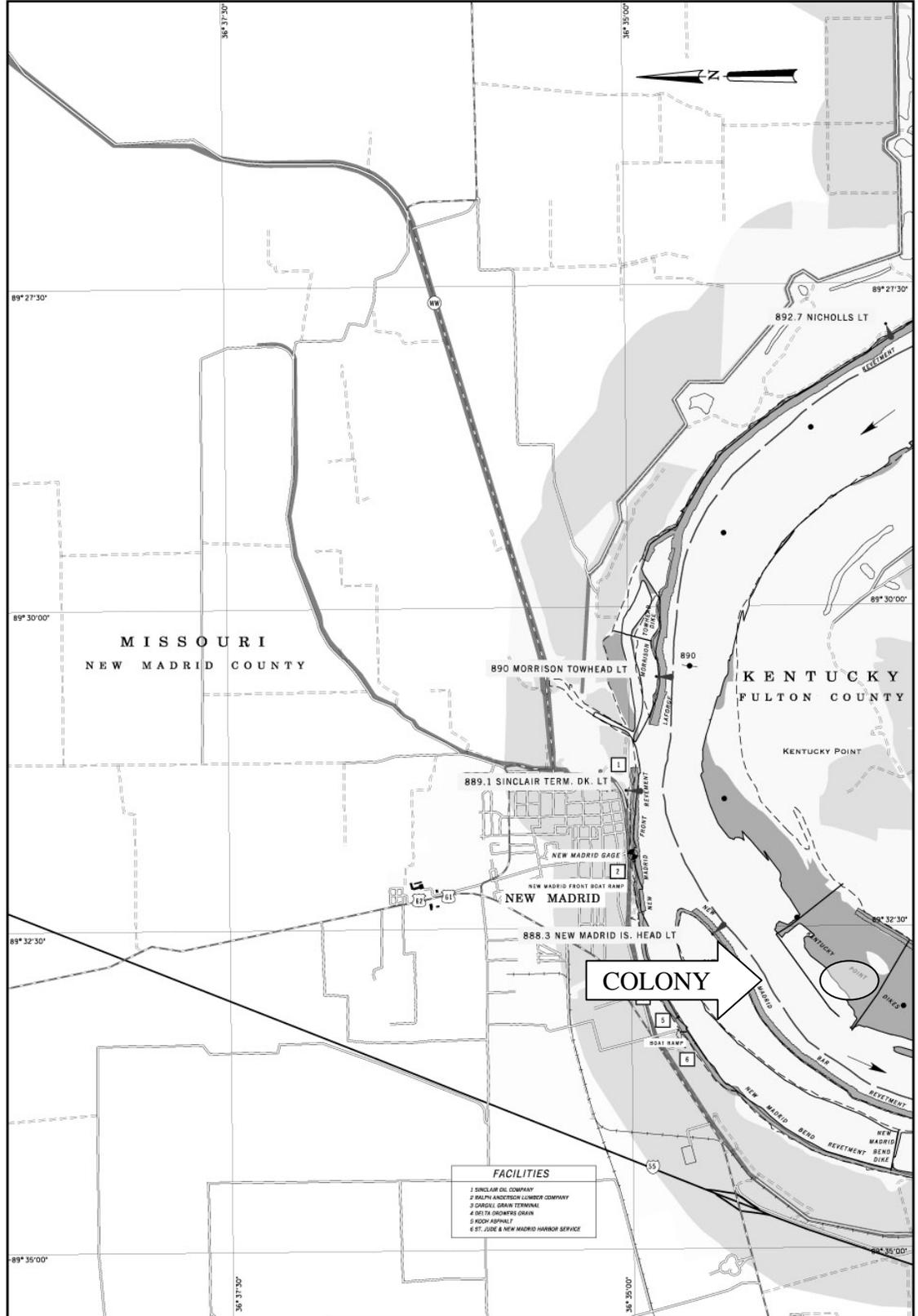
1998



MAP NO. 33

Least Tern Survey – 2005  
Mississippi River  
Cape Girardeau, MO to Baton Rouge, LA  
Nest Colony Locations  
Memphis District Corps of Engineers  
A-I-4

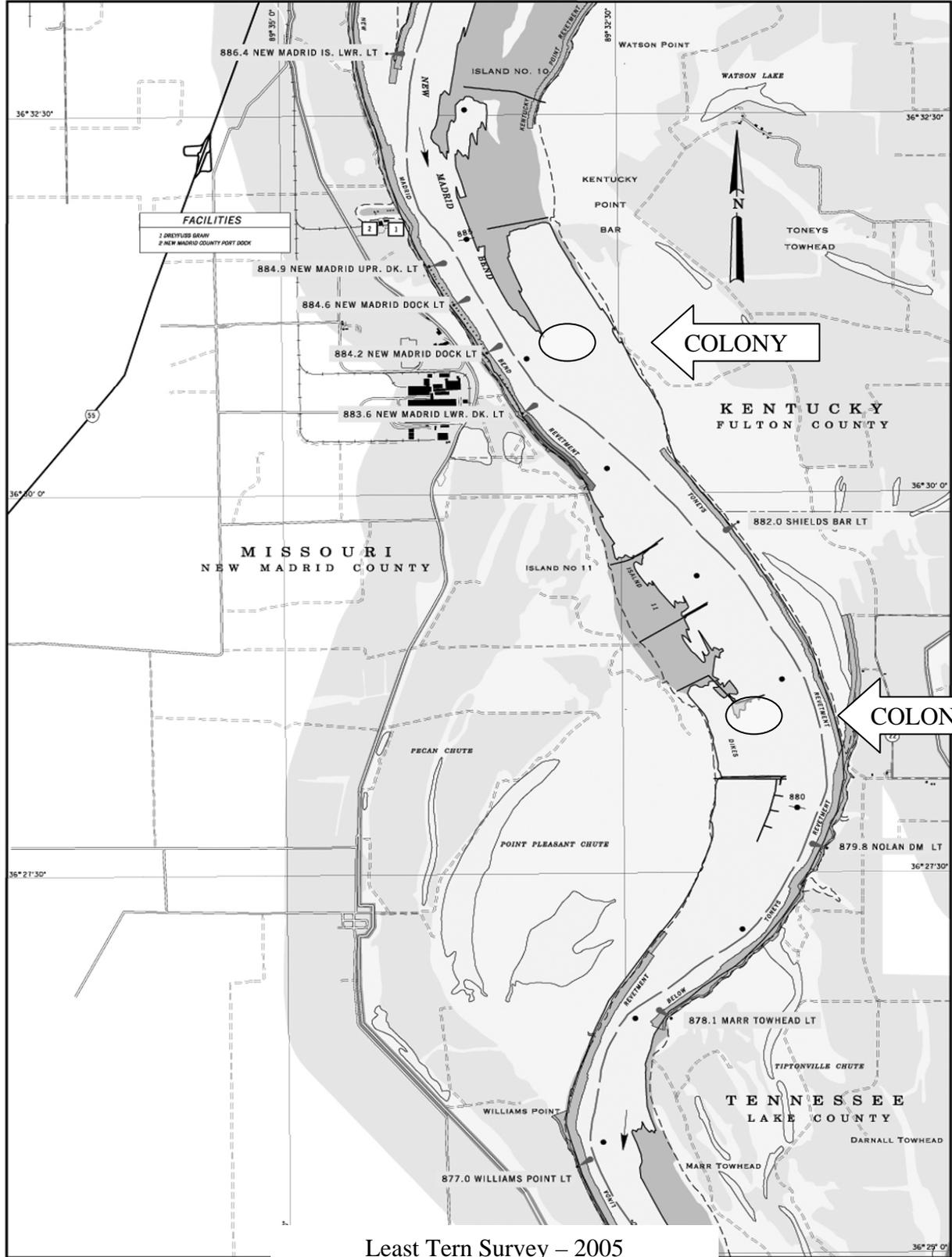




1998

MAP NO. 36

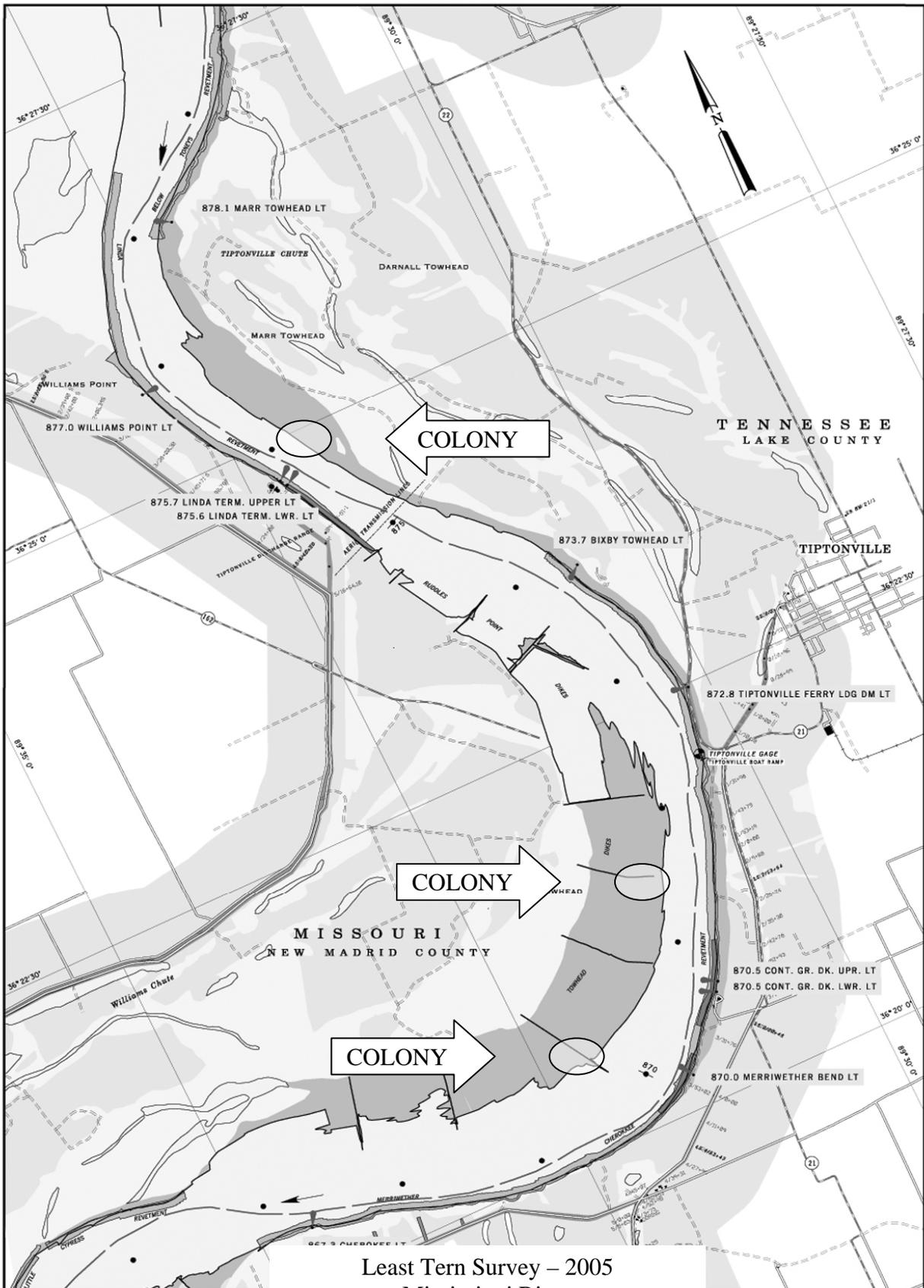
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-6



1998

MAP NO. 37

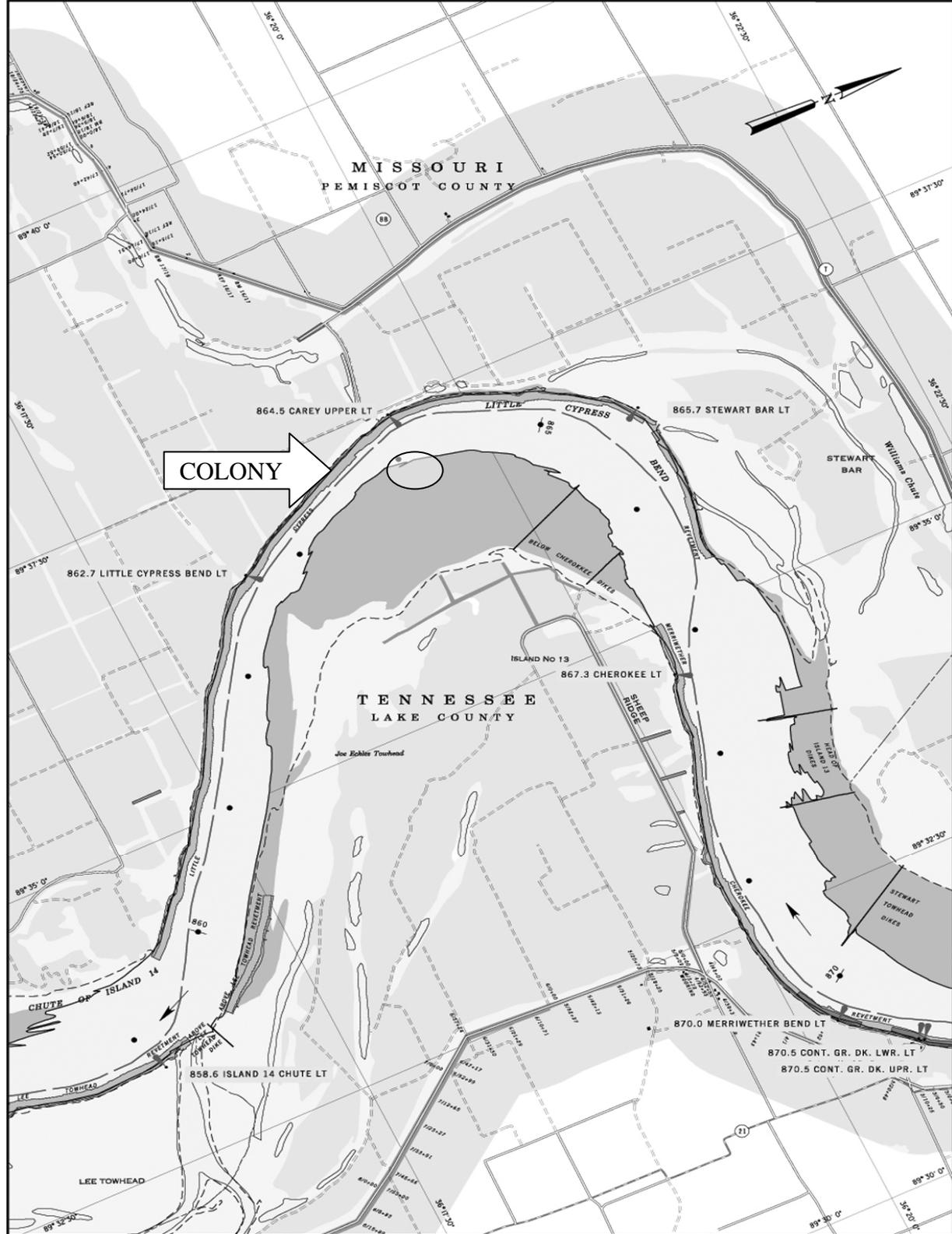
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-7



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-8

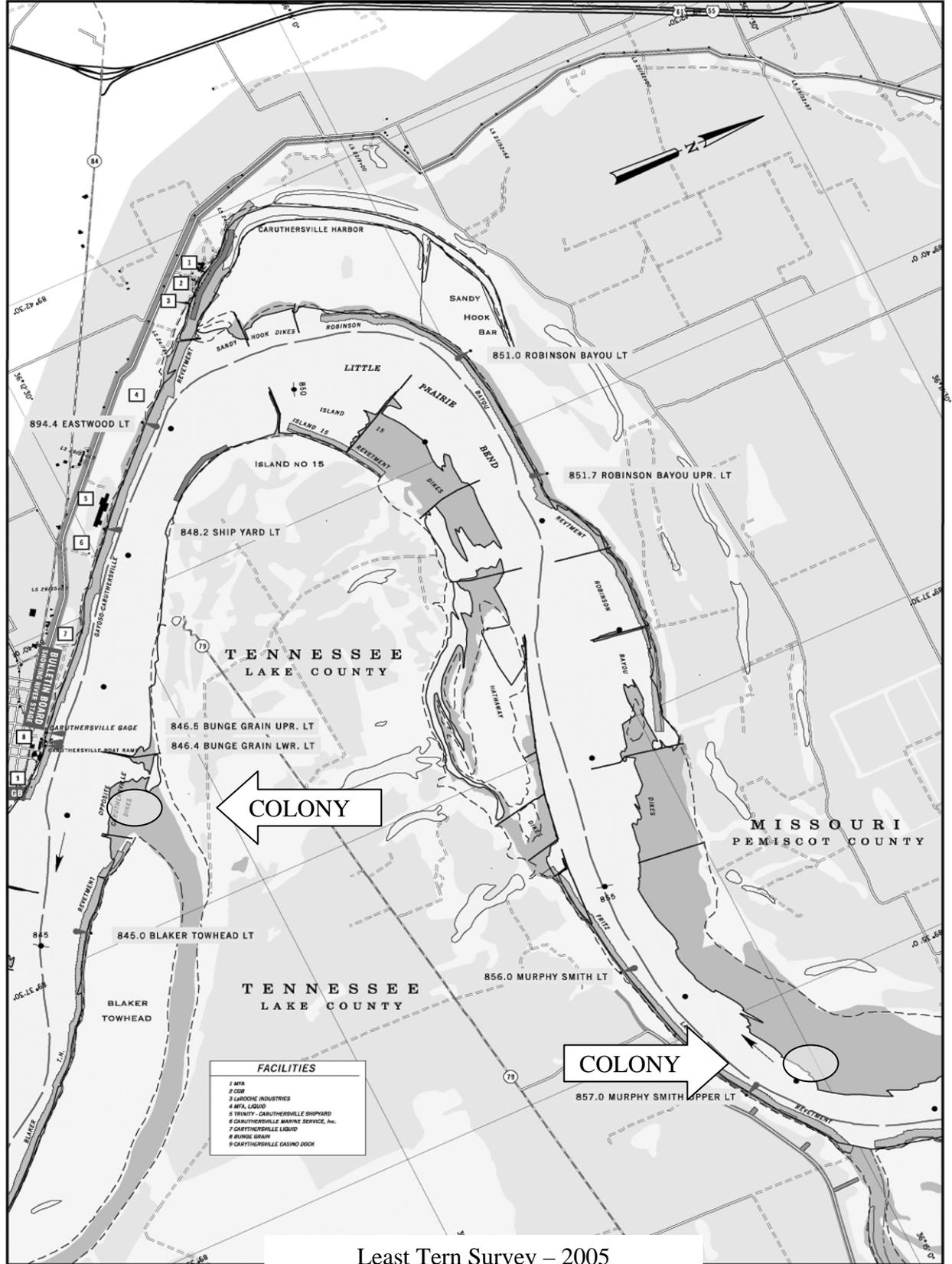
MAP NO. 38



1998

MAP NO. 39

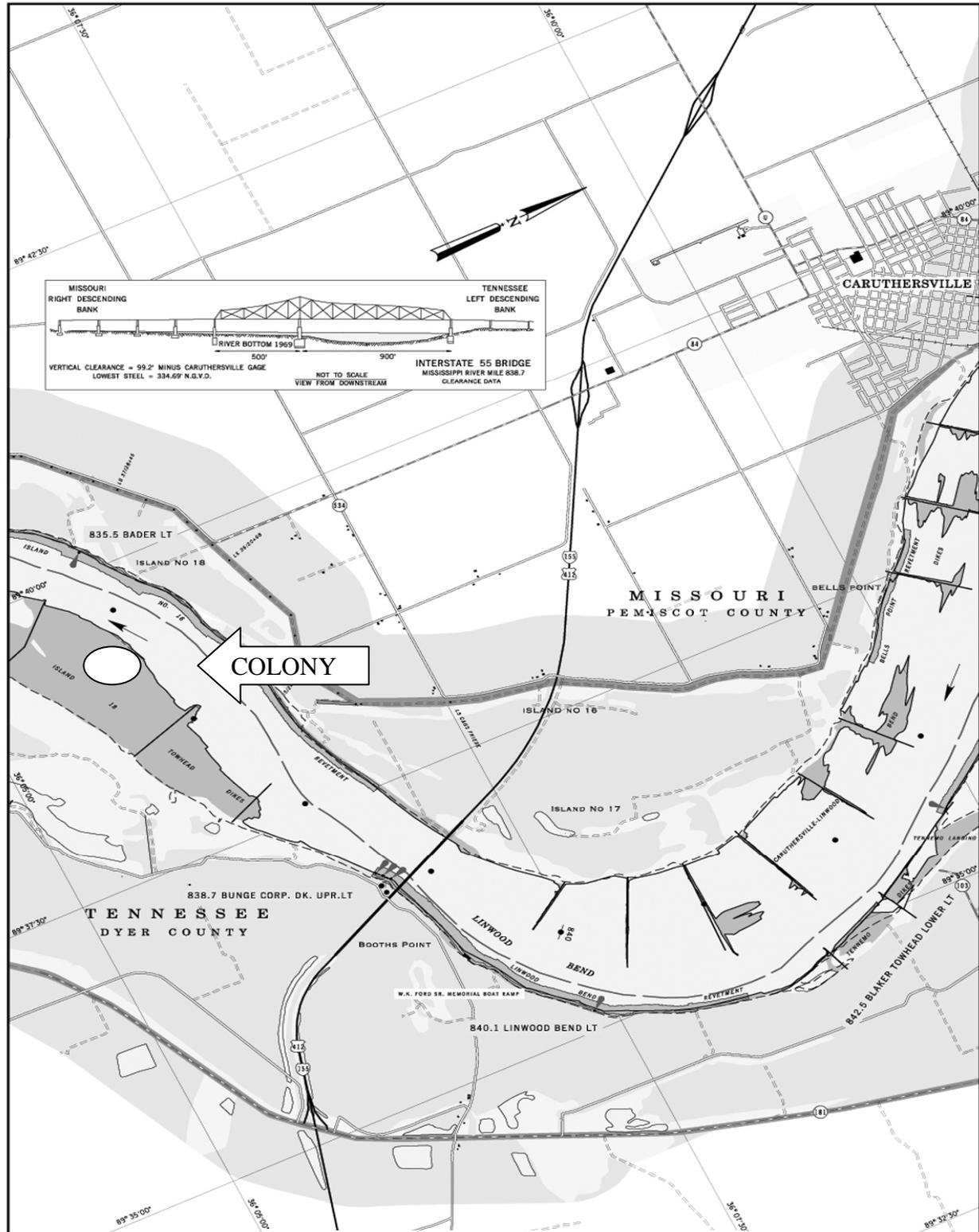
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-9



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-10

MAP NO. 40



1998

Least Tern Survey – 2005

MAP NO. 42

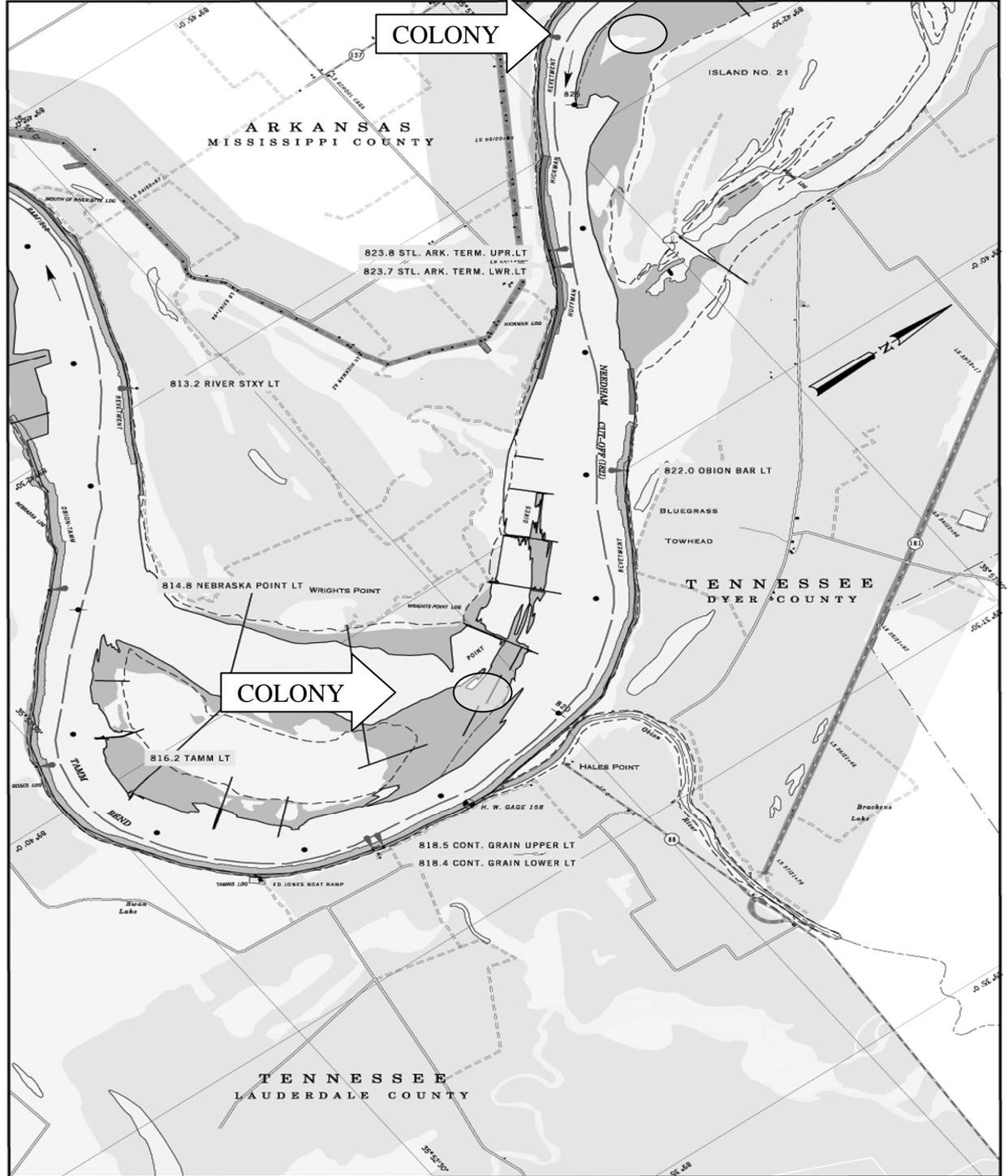
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

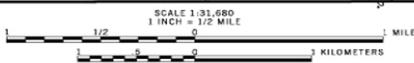
Nest Colony Locations

Memphis District Corps of Engineers

A-I-11

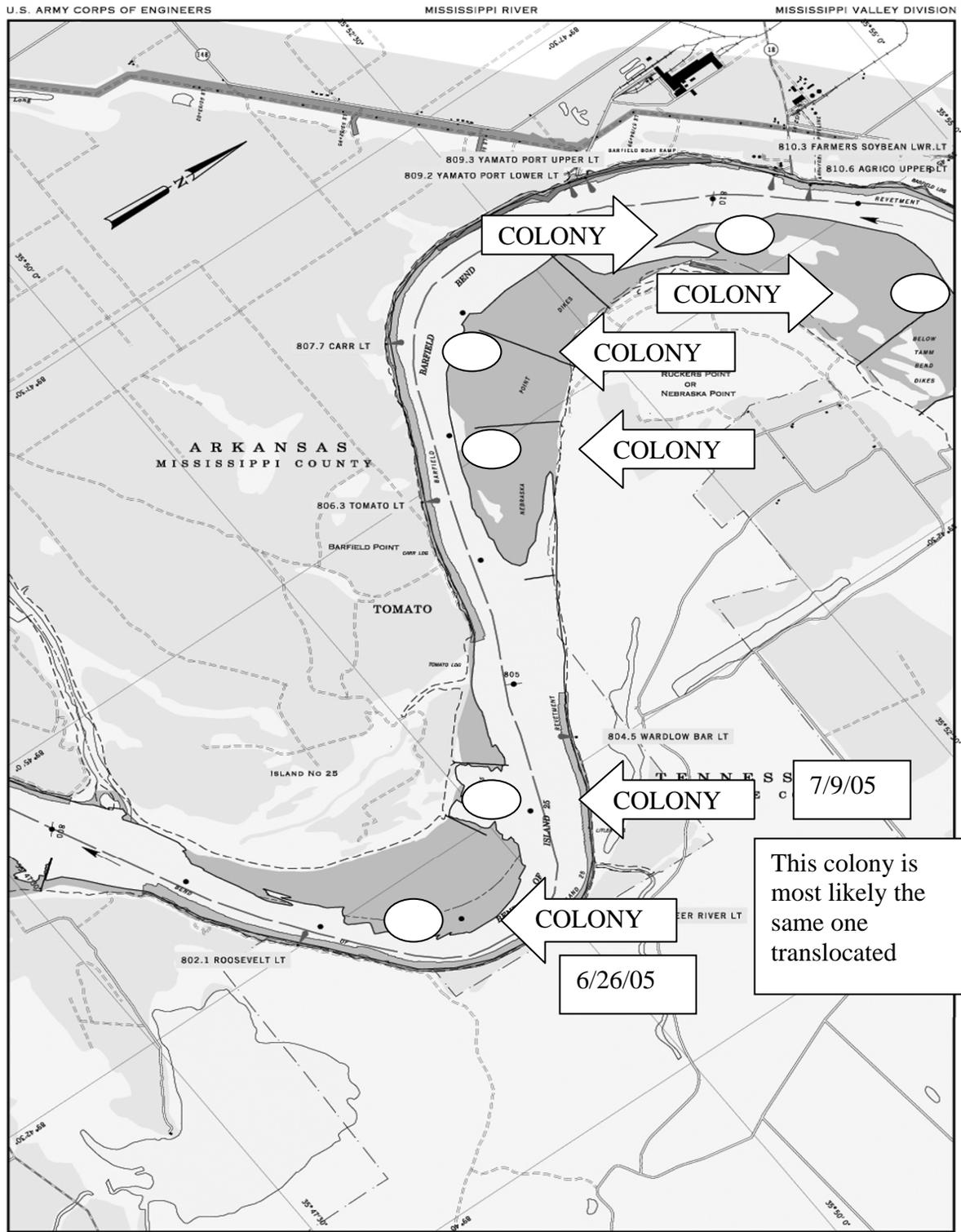


1998

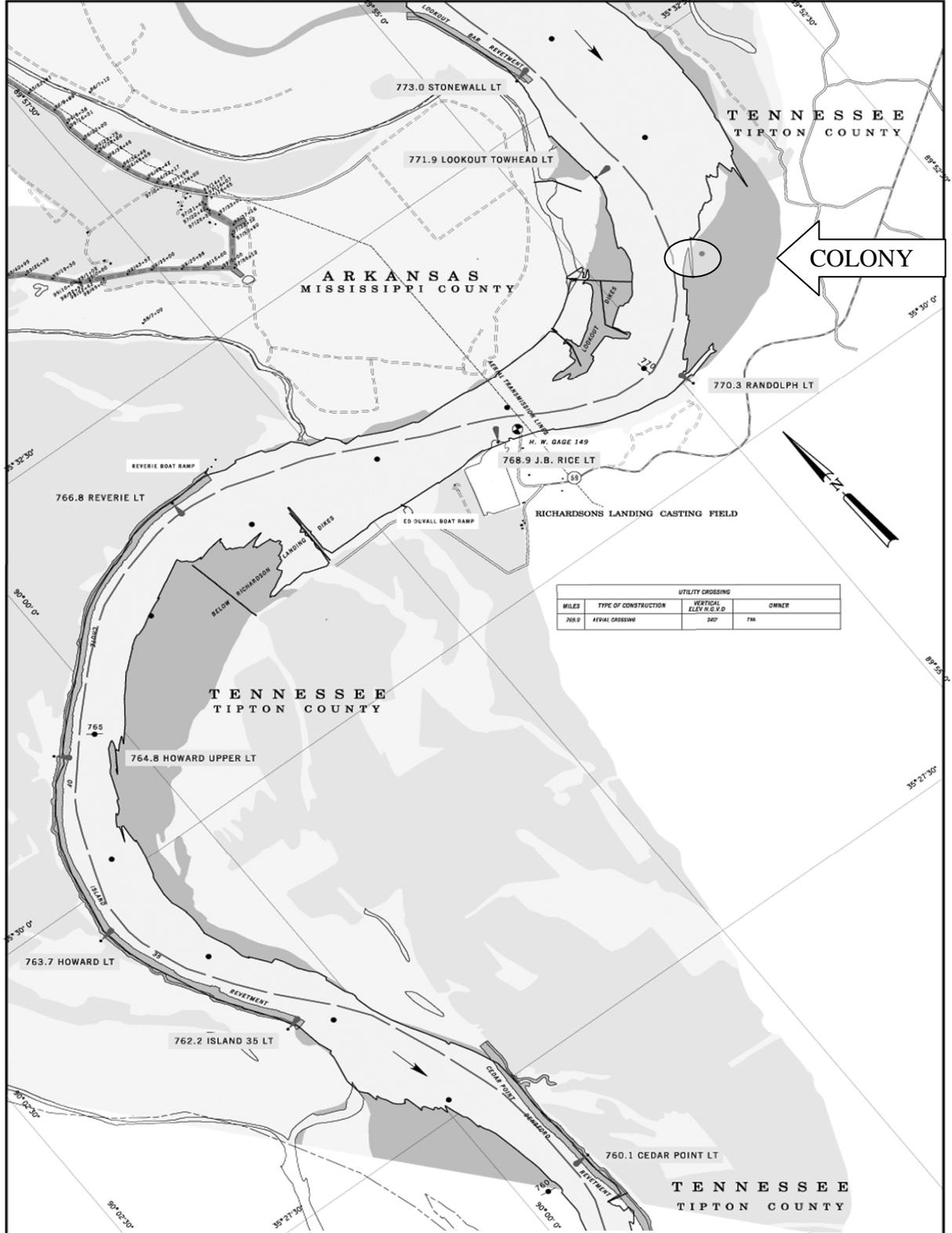


MAP NO. 44

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-12



Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-13

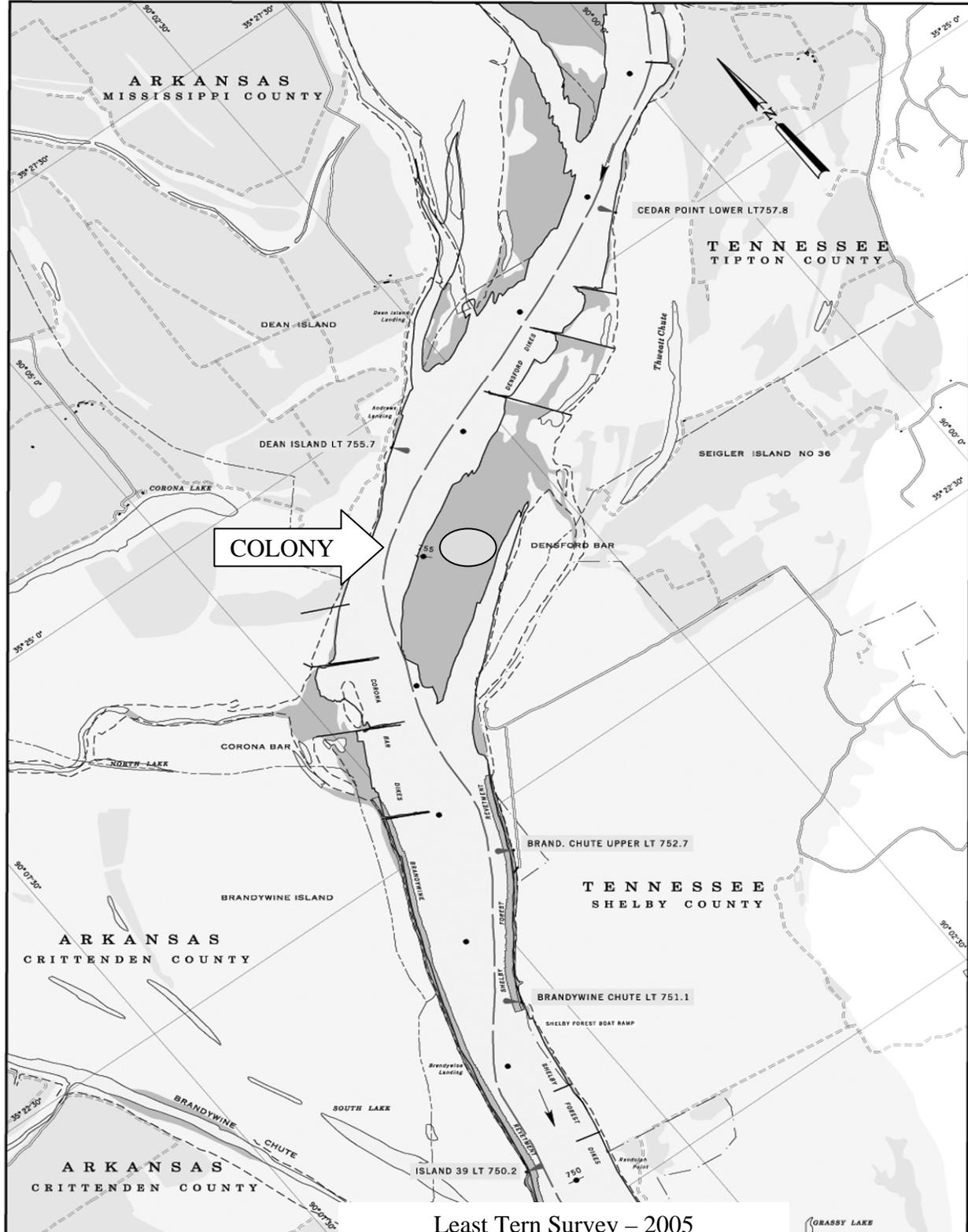


UTILITY CROSSING			
MILES	TYPE OF CONSTRUCTION	VERTICAL ELEV. H.G.S.D.	OWNER
768.9	FEHVAL CROSSING	240'	FWA

1998

MAP NO. 51

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-14

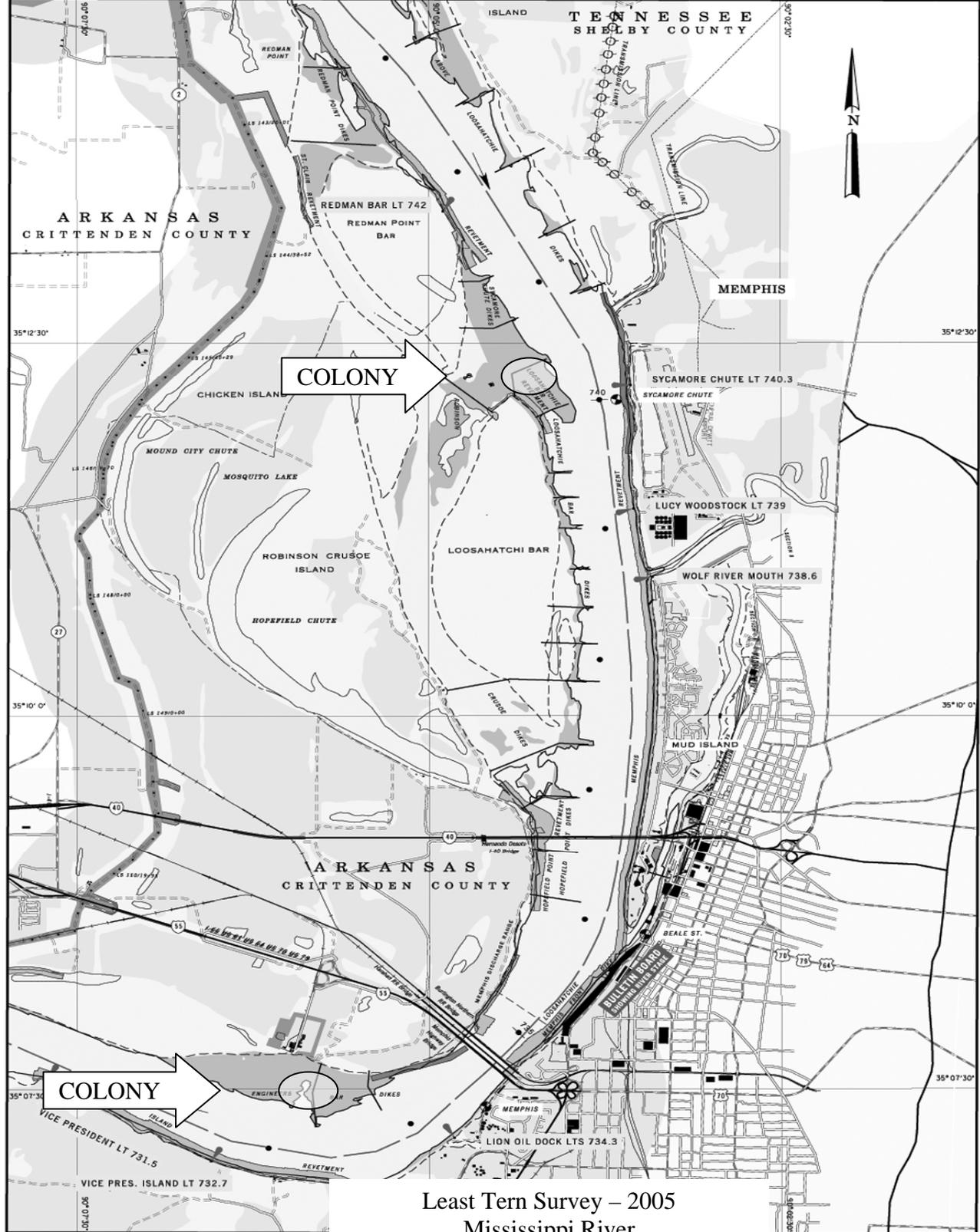


1998

GRASSY LAKE

MAP NO. 53

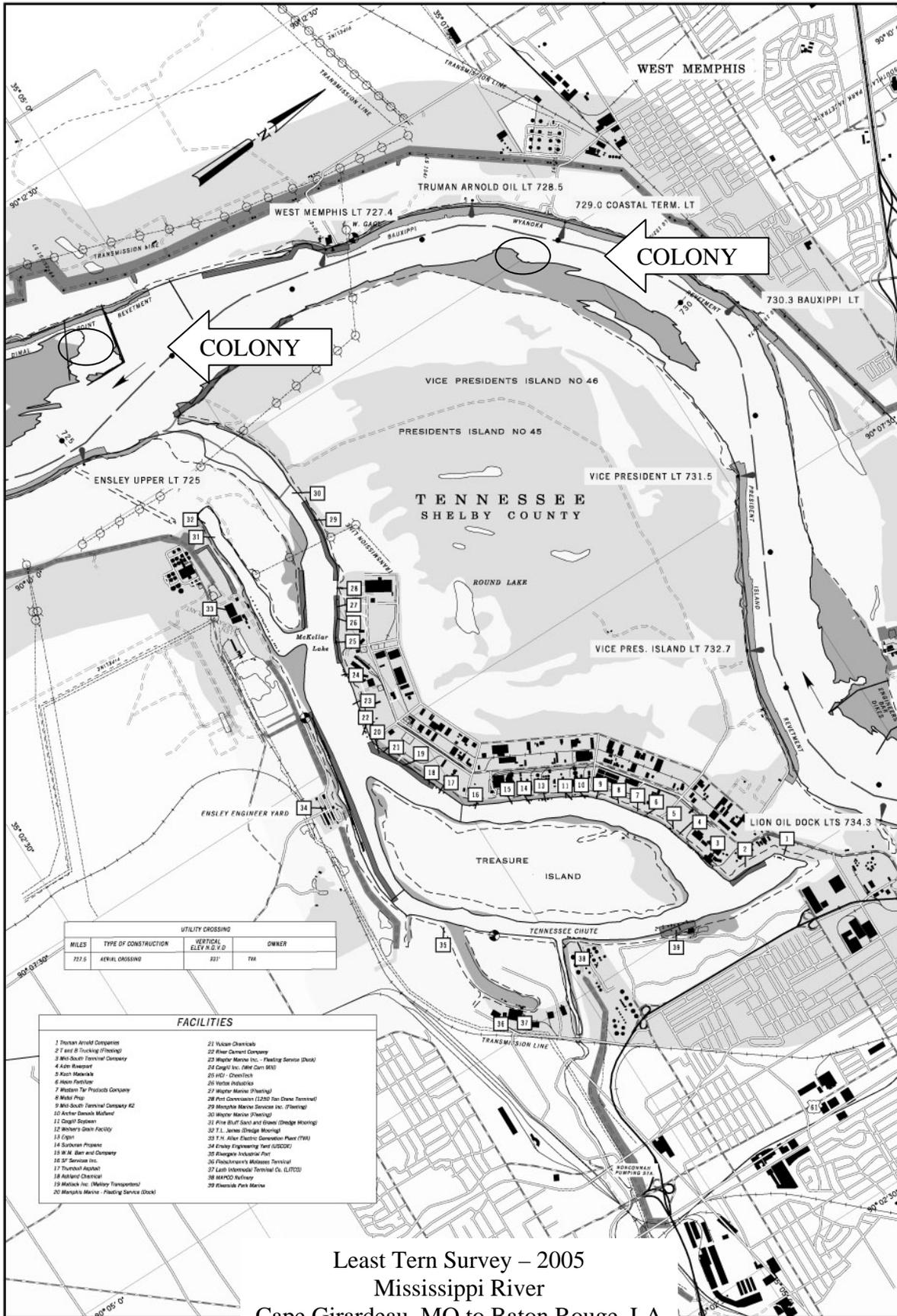
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-15



1998

MAP NO. 57

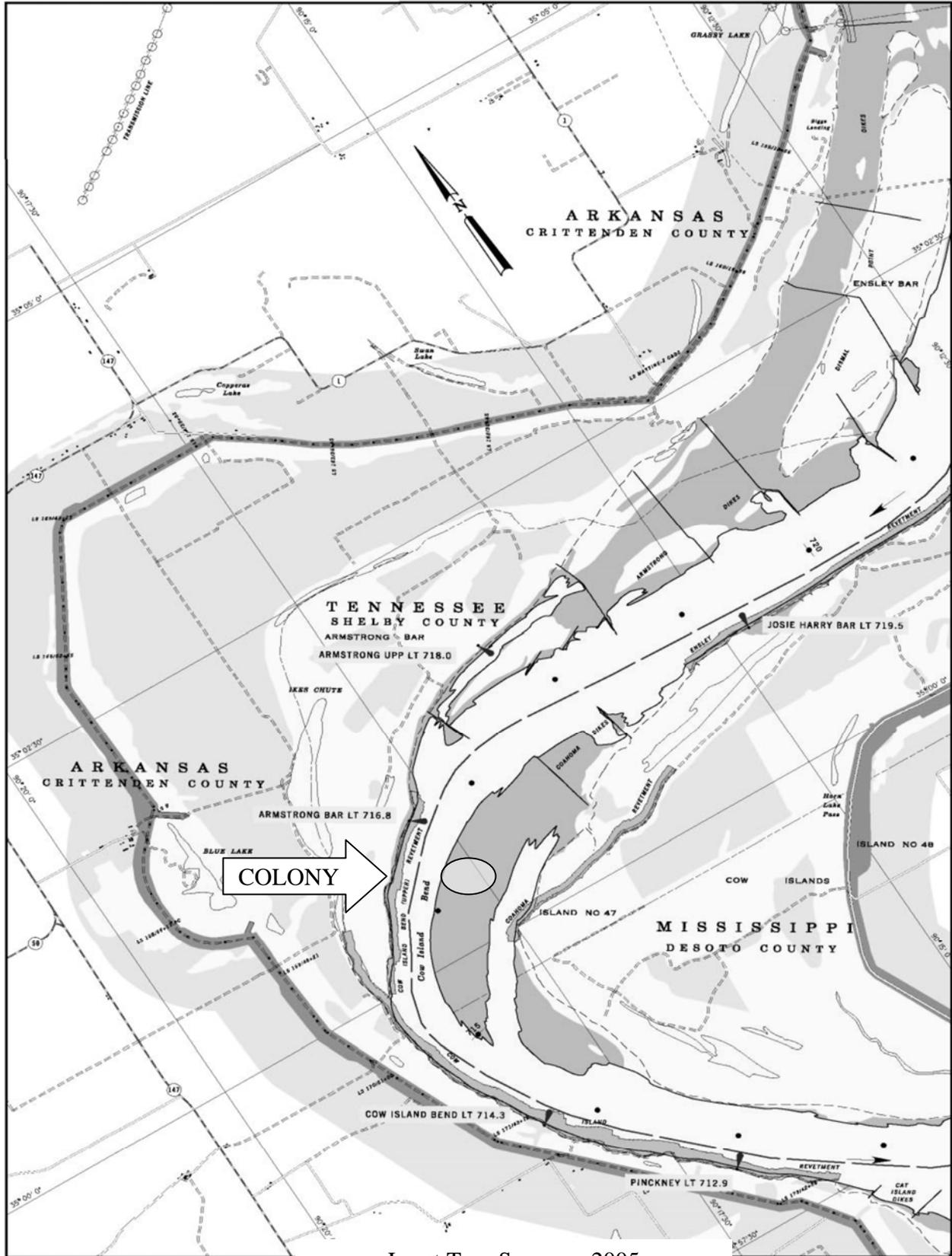
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-16



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-17

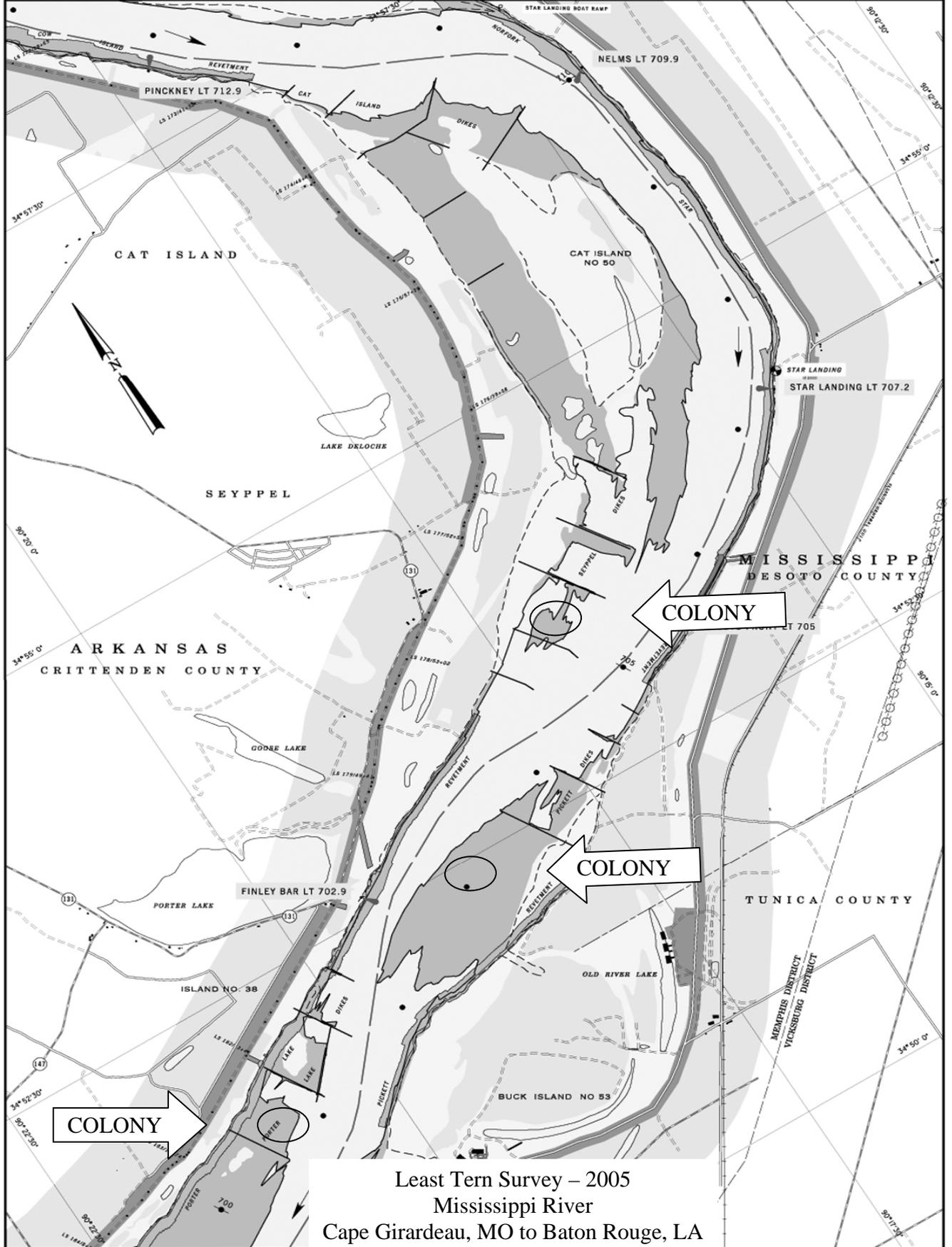
MAP NO. 58



1998

MAP NO. 60

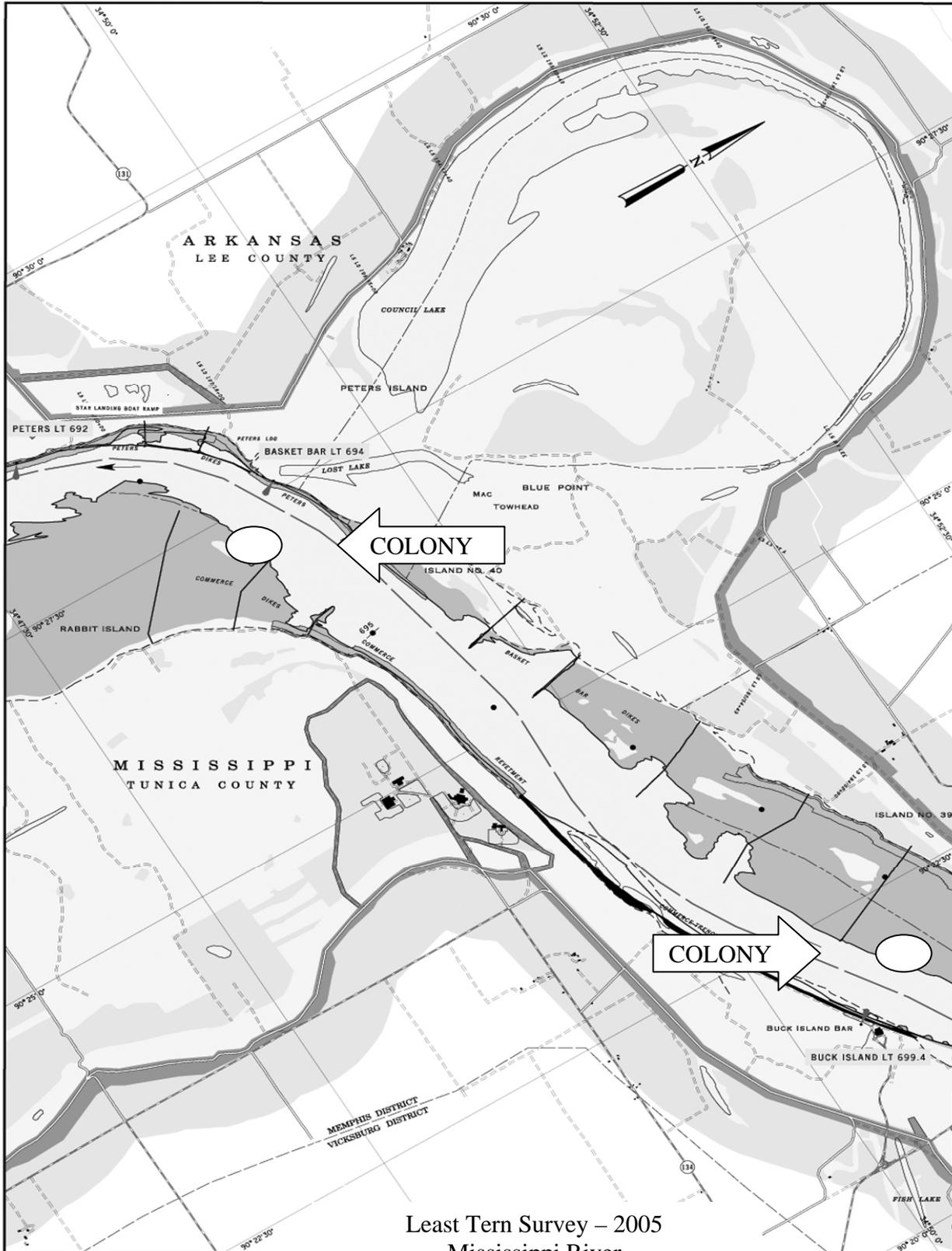
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-18



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-19

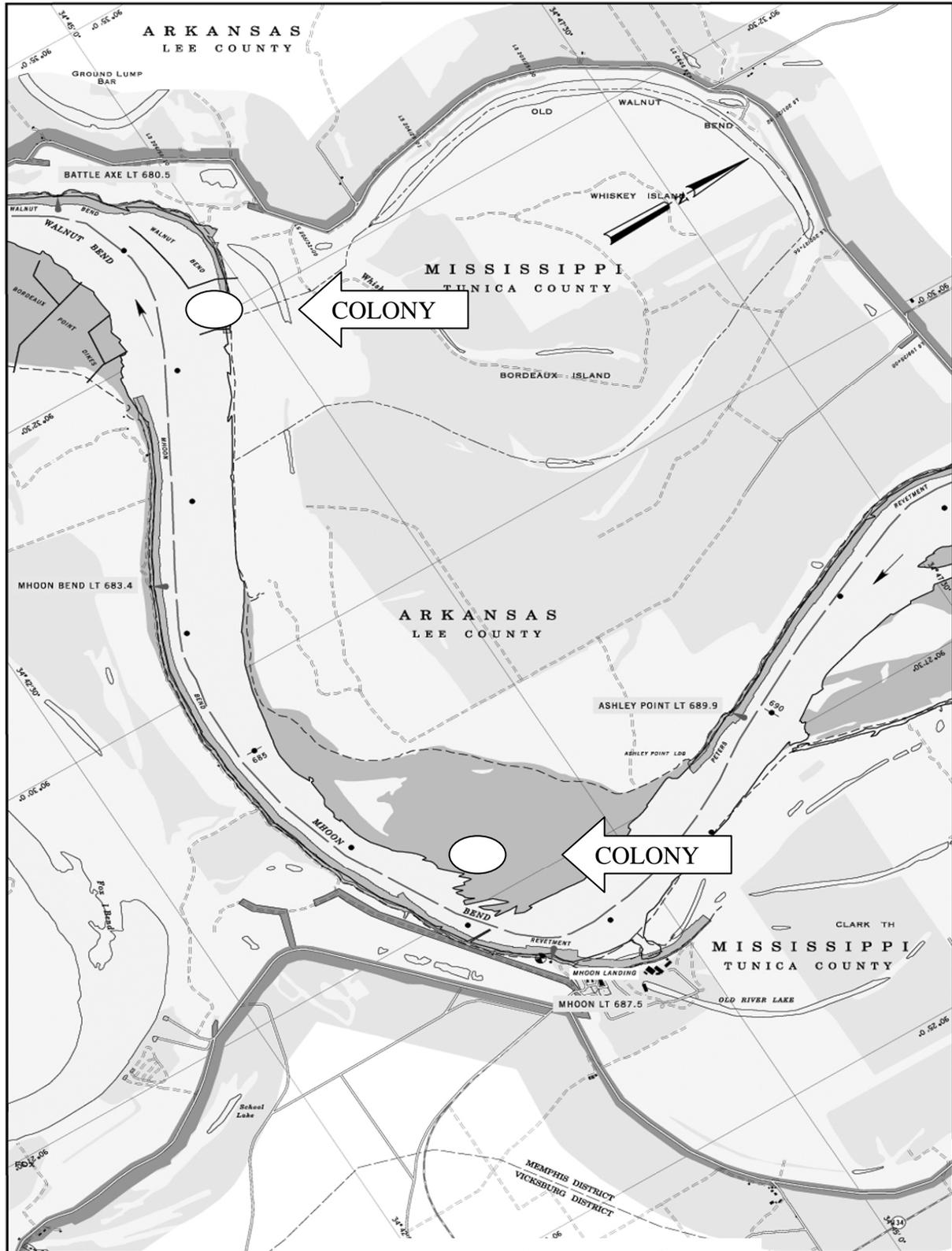
MAP NO. 61



1998

MAP NO. 62

Least Tern Survey – 2005  
Mississippi River  
Cape Girardeau, MO to Baton Rouge, LA  
Nest Colony Locations  
Memphis District Corps of Engineers  
A-I-20



1998

Least Tern Survey – 2005

MAP NO. 63

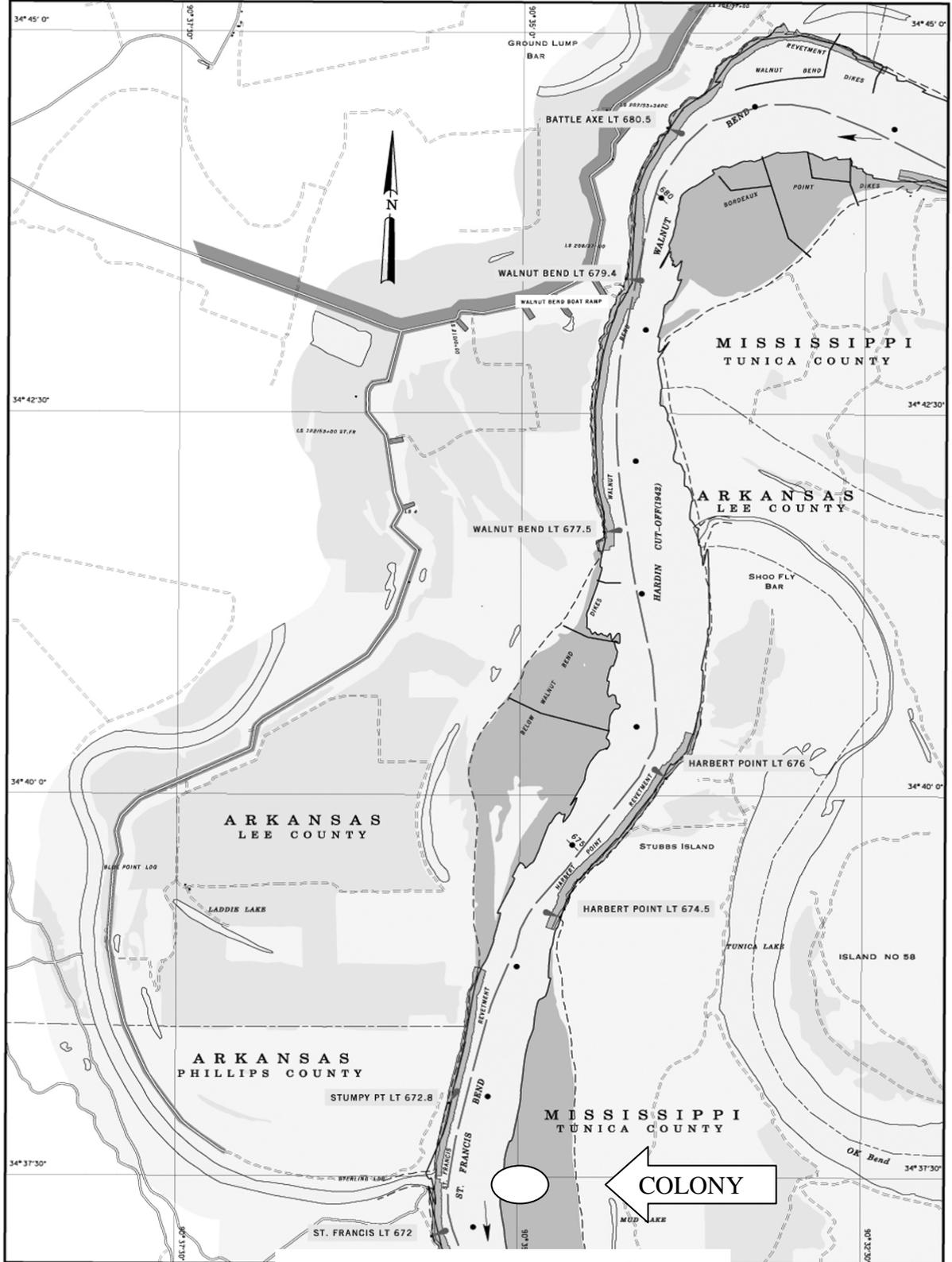
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

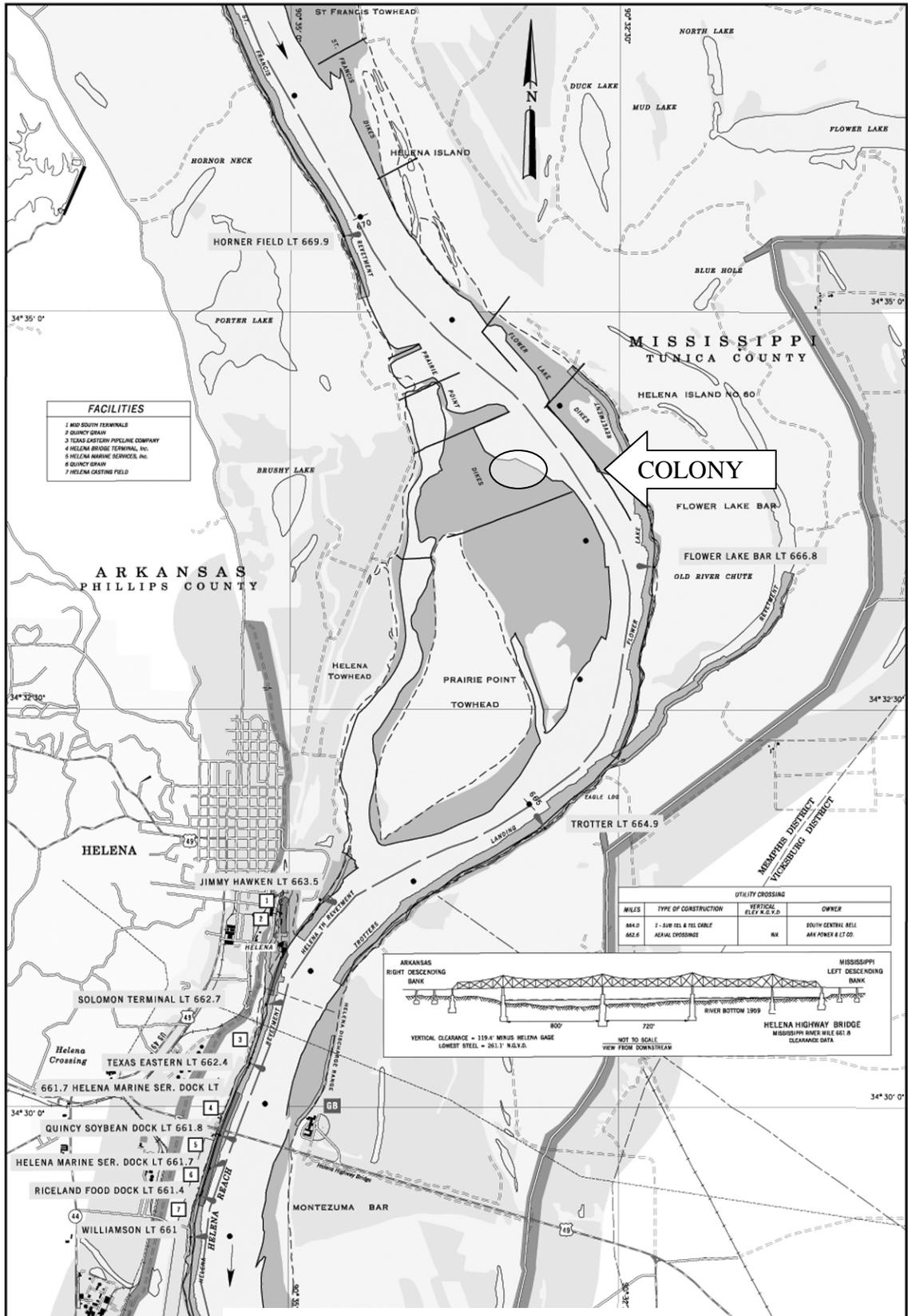
A-I-21



1998

MAP NO. 64

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-22

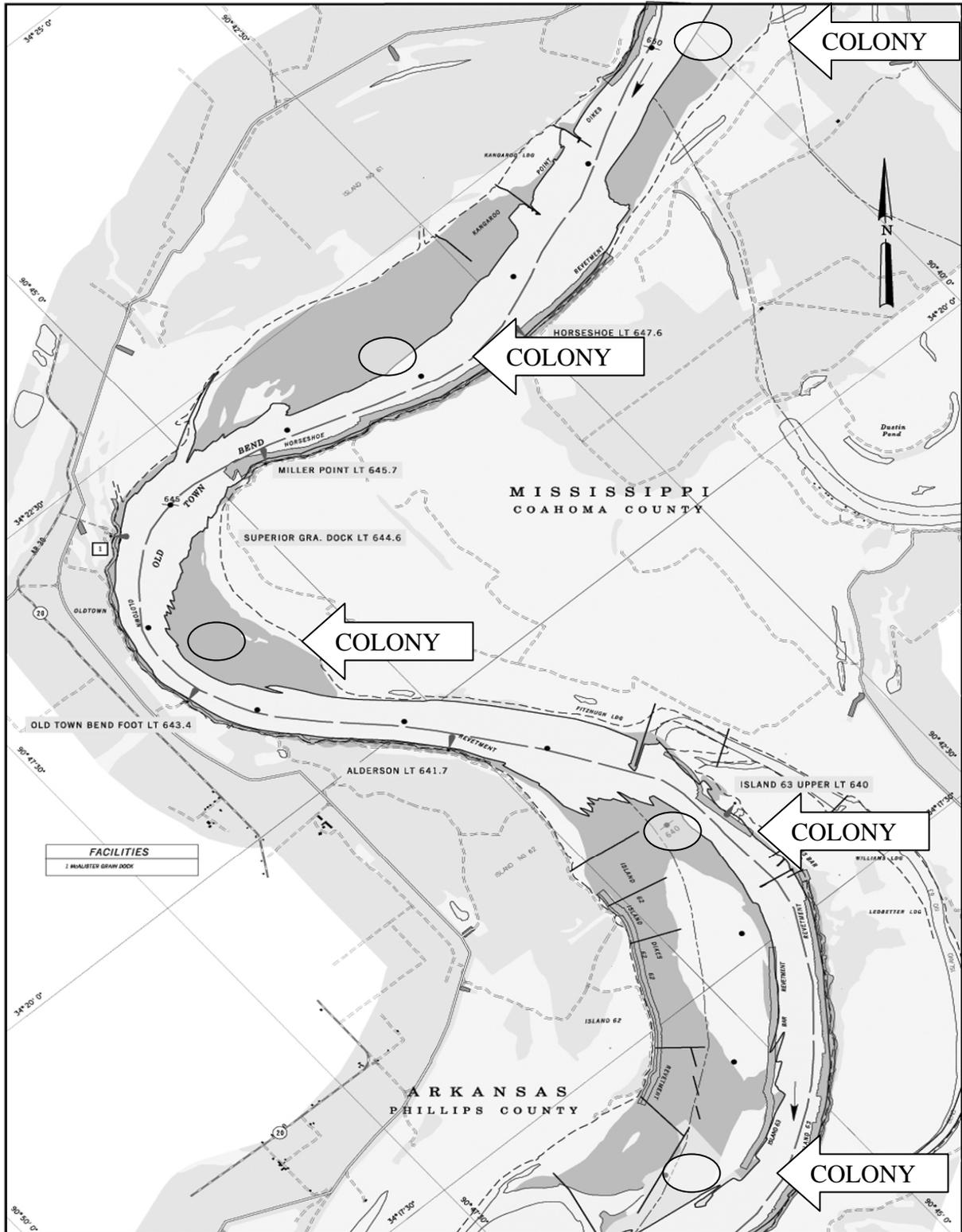


1998

Least Tern Survey – 2005

MAP NO. 66

Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-23

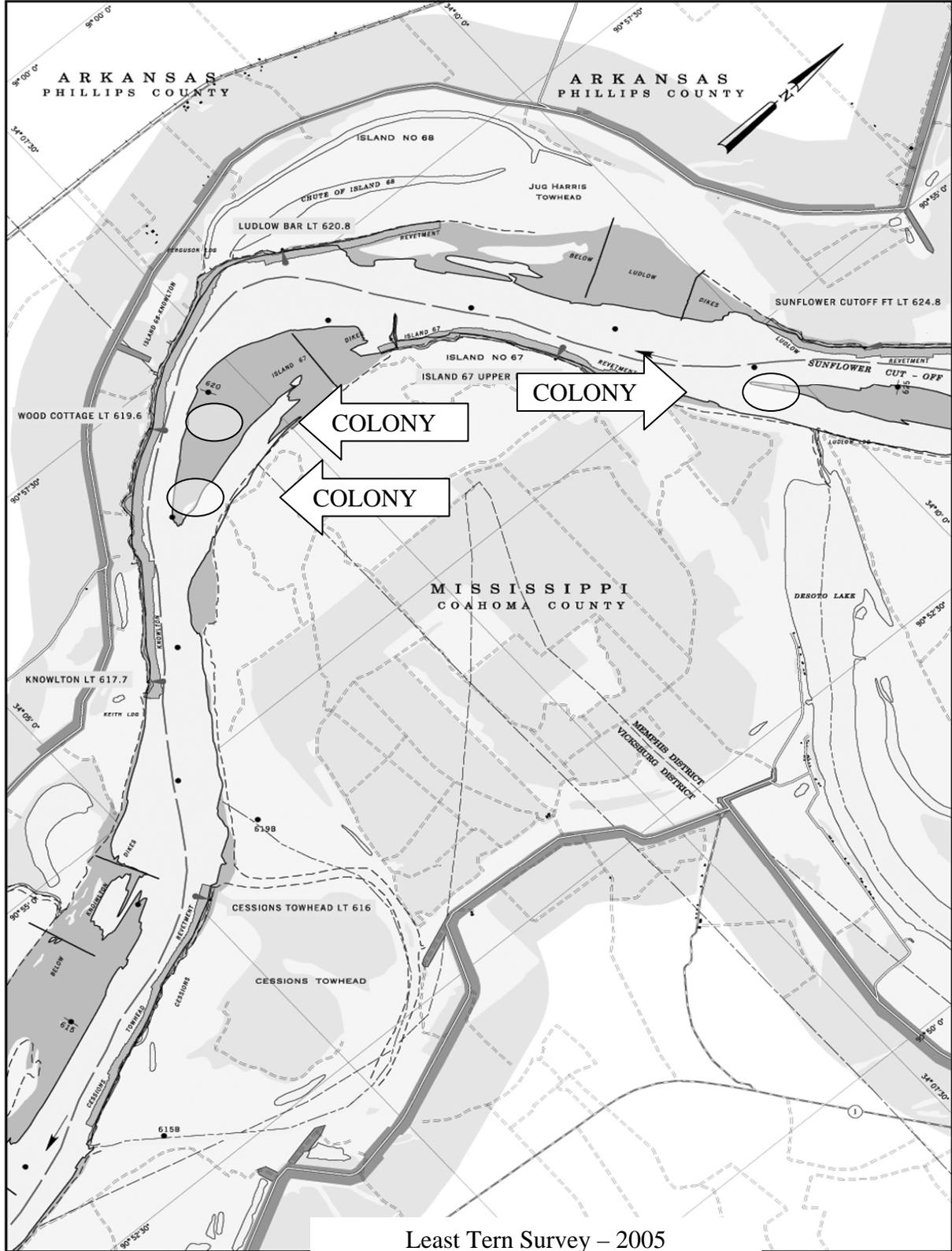


Least Tern Survey – 2005

MAP NO. 68

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

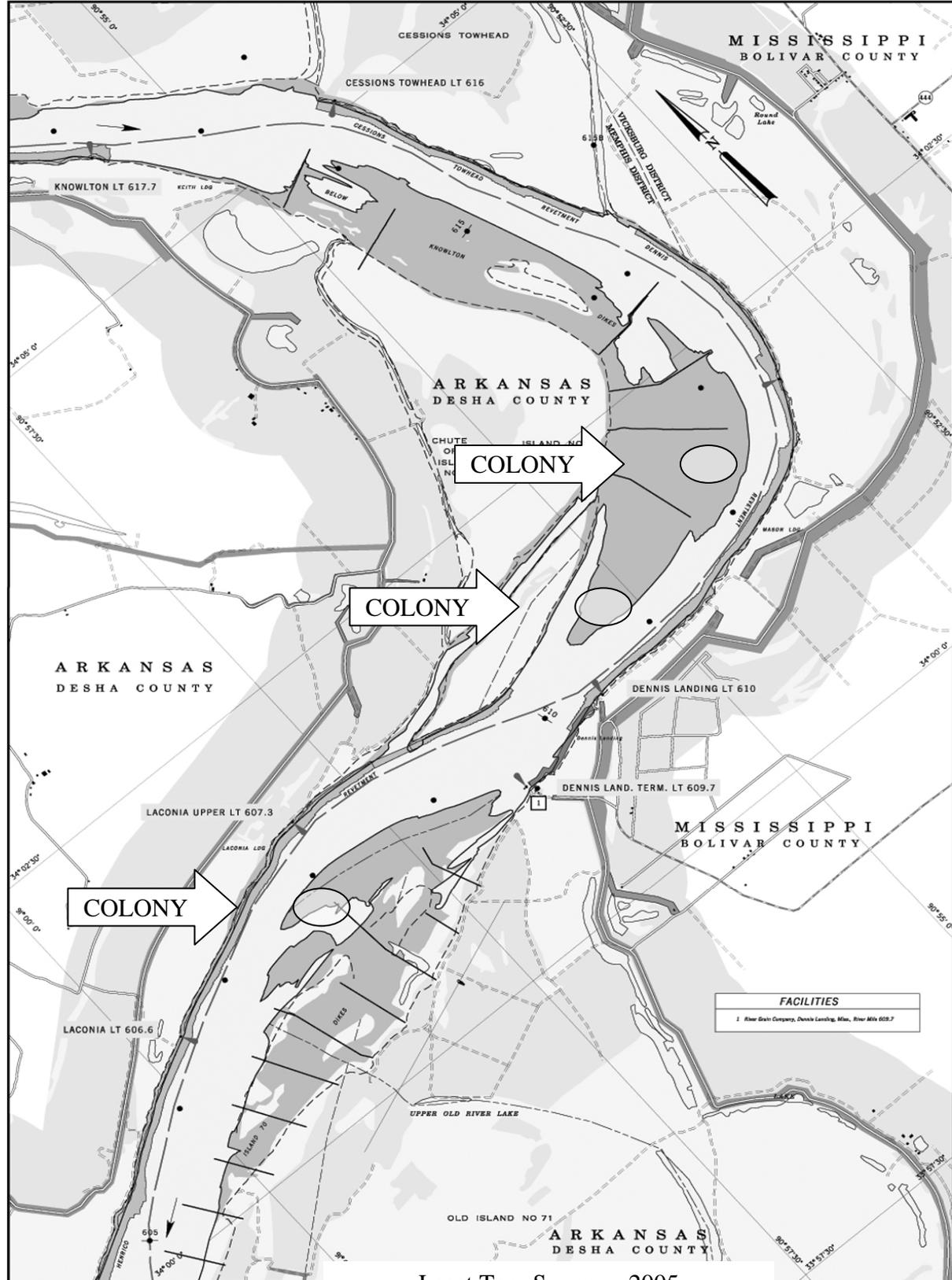




1998

MAP NO. 72

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-26



1998

Least Tern Survey – 2005

MAP NO. 73

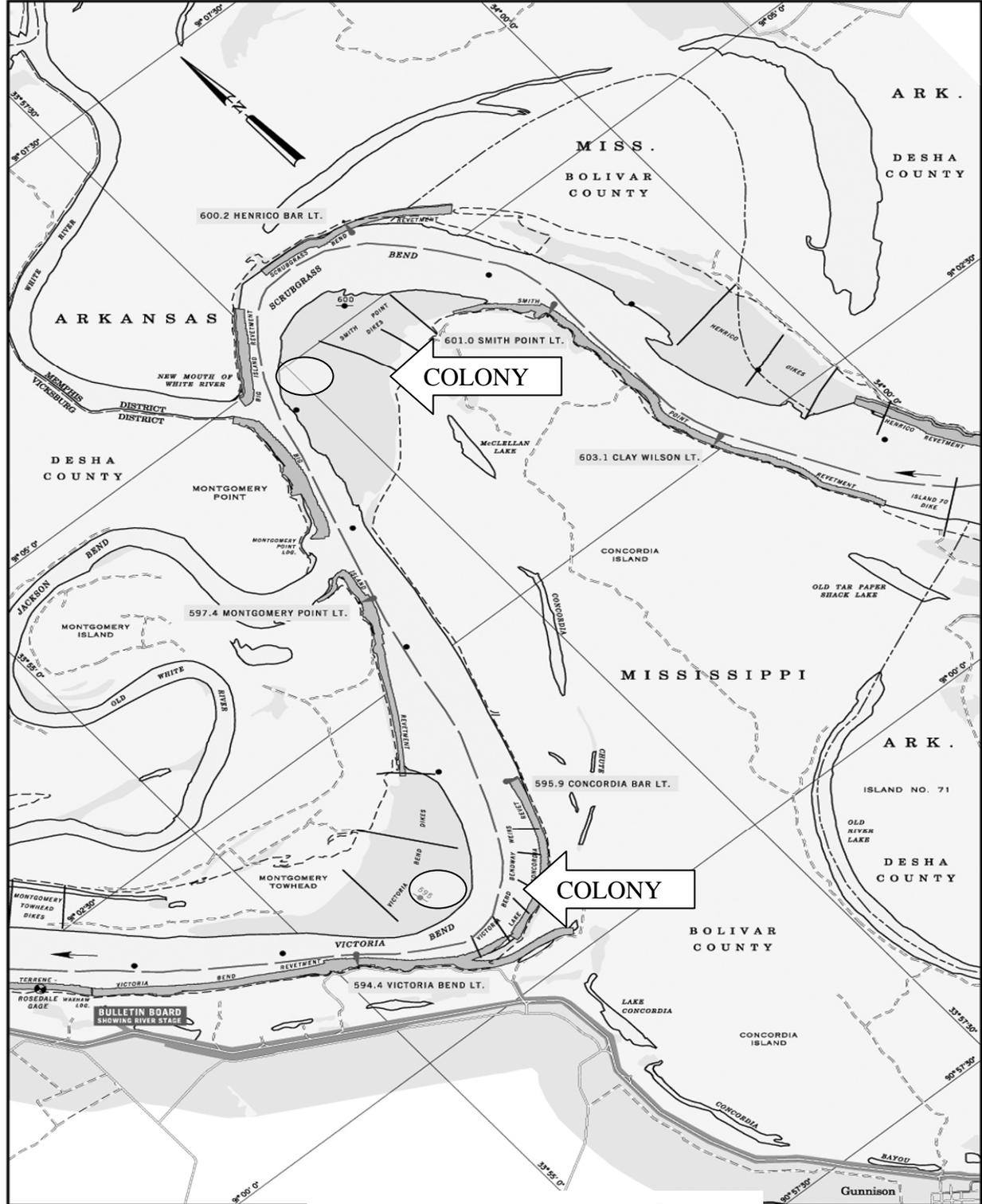
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

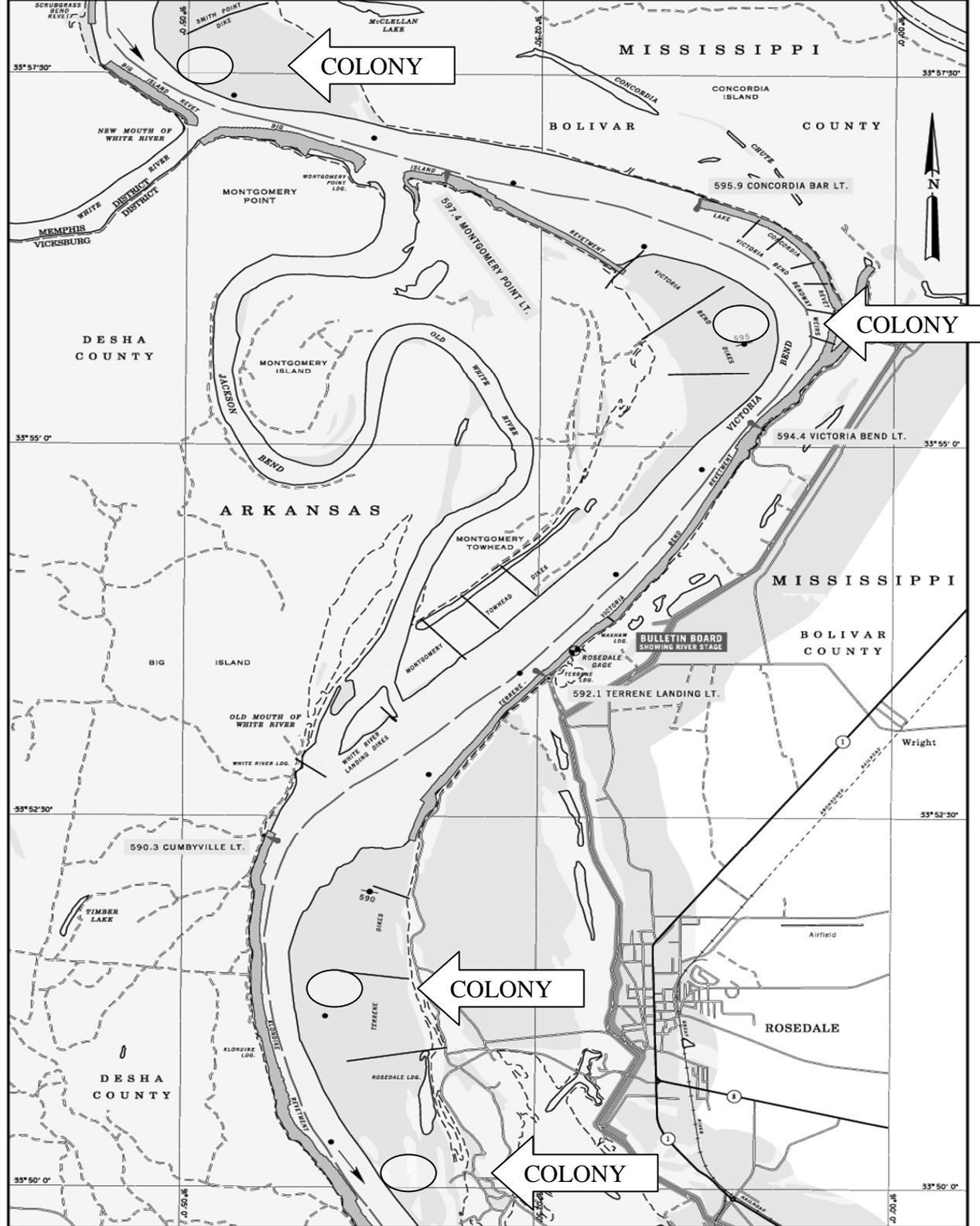
A-I-27



1998

MAP NO. 74

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-28



1998

Least Tern Survey – 2005

MAP NO. 75

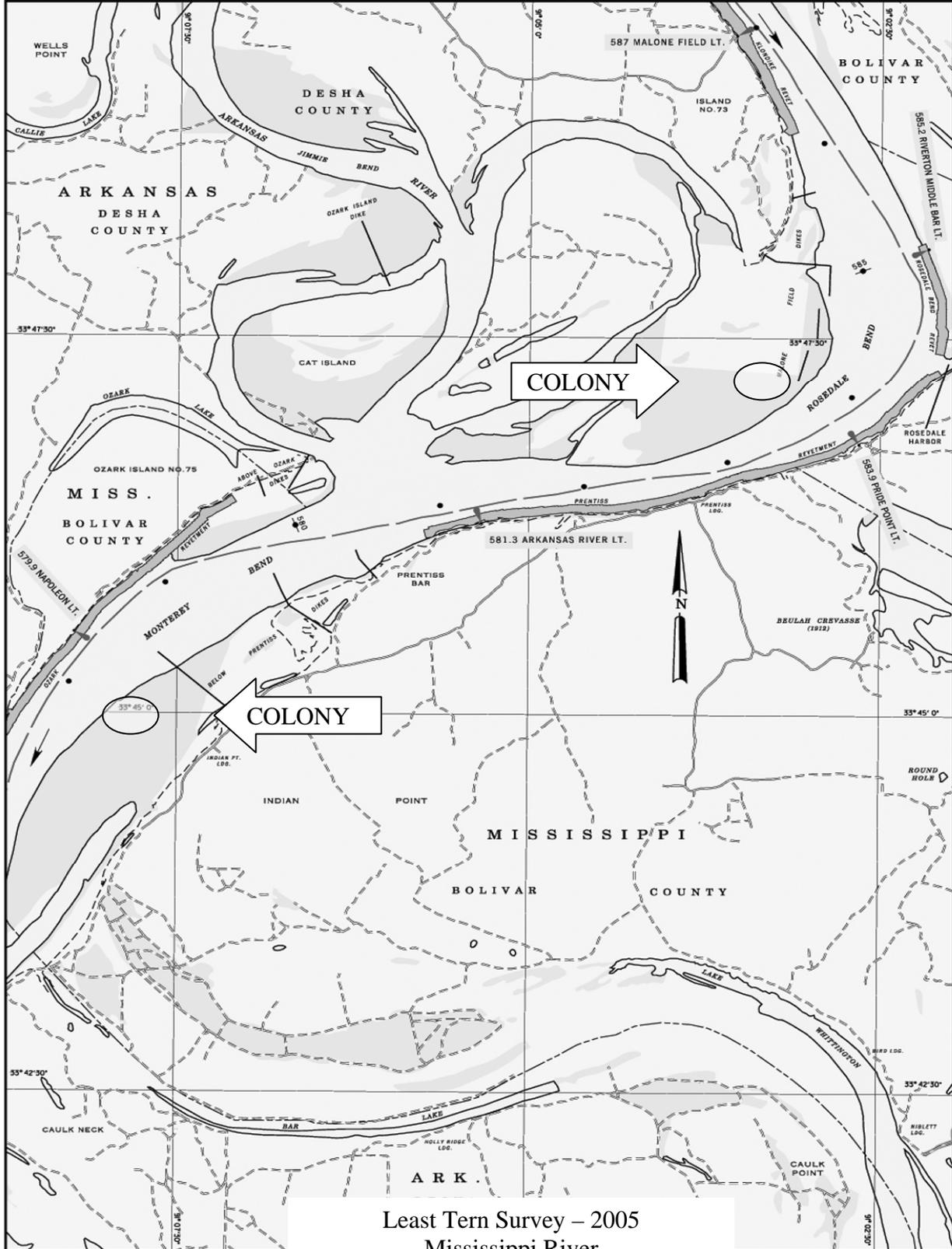
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

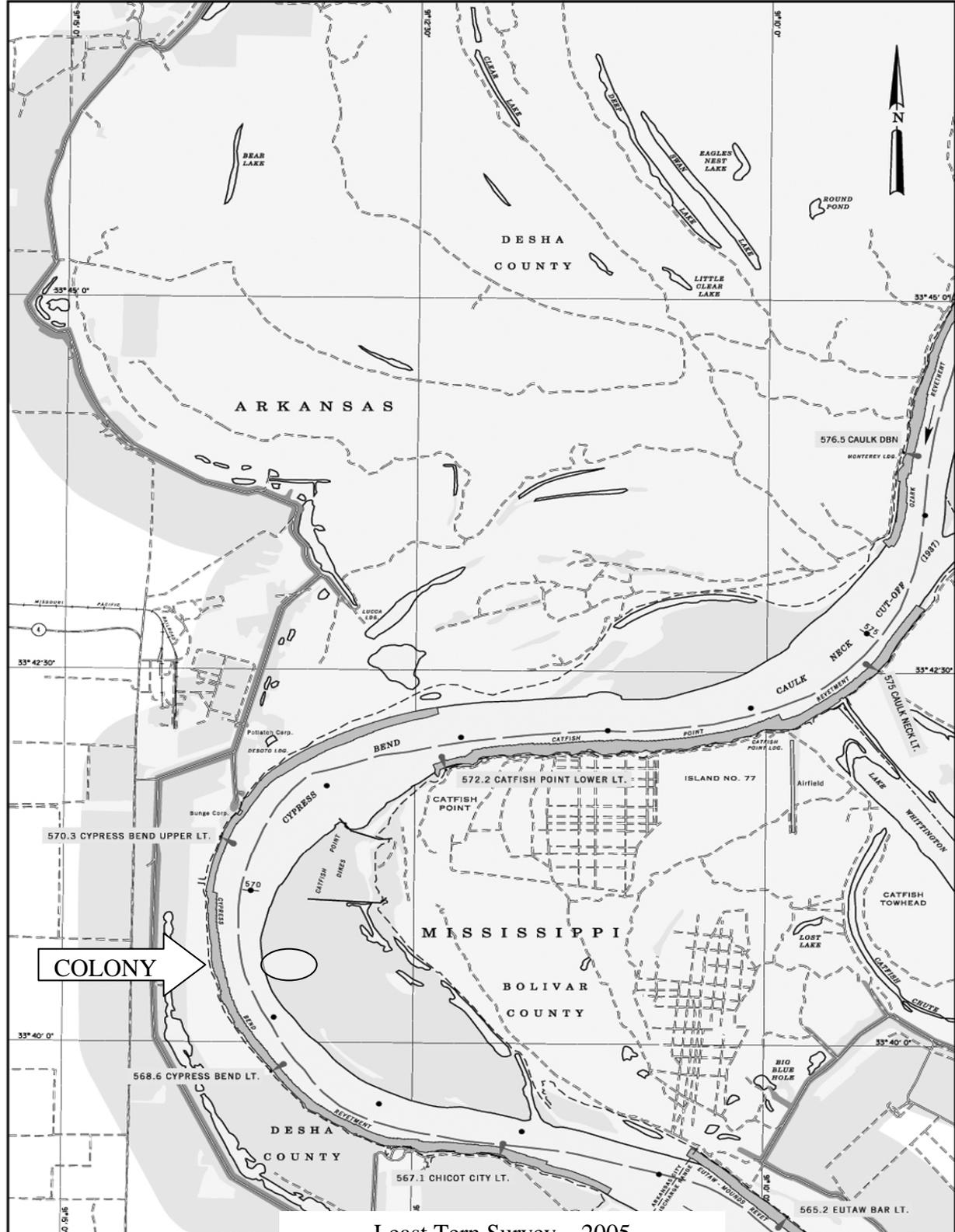
A-I-29



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-30

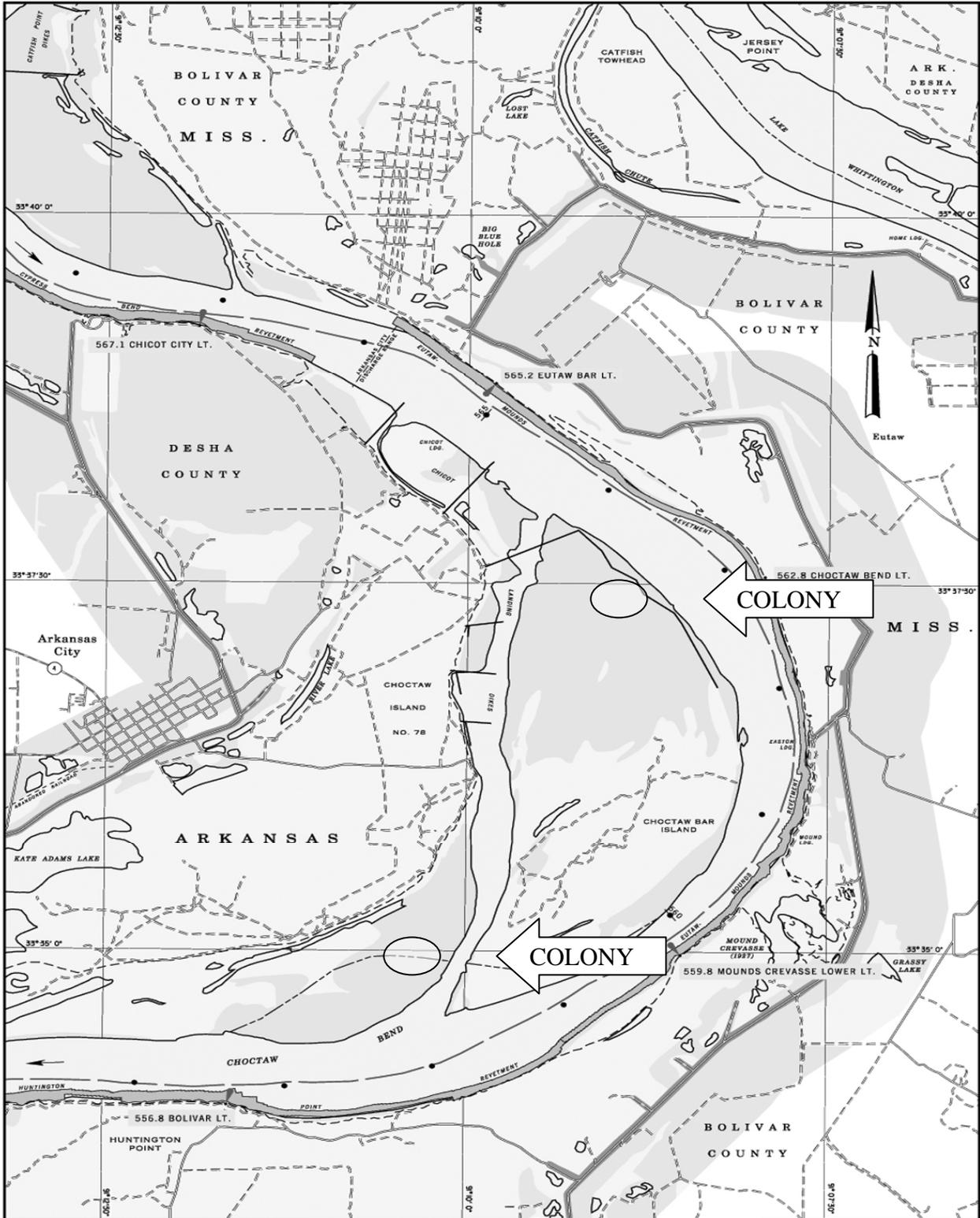
MAP NO. 76



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-31

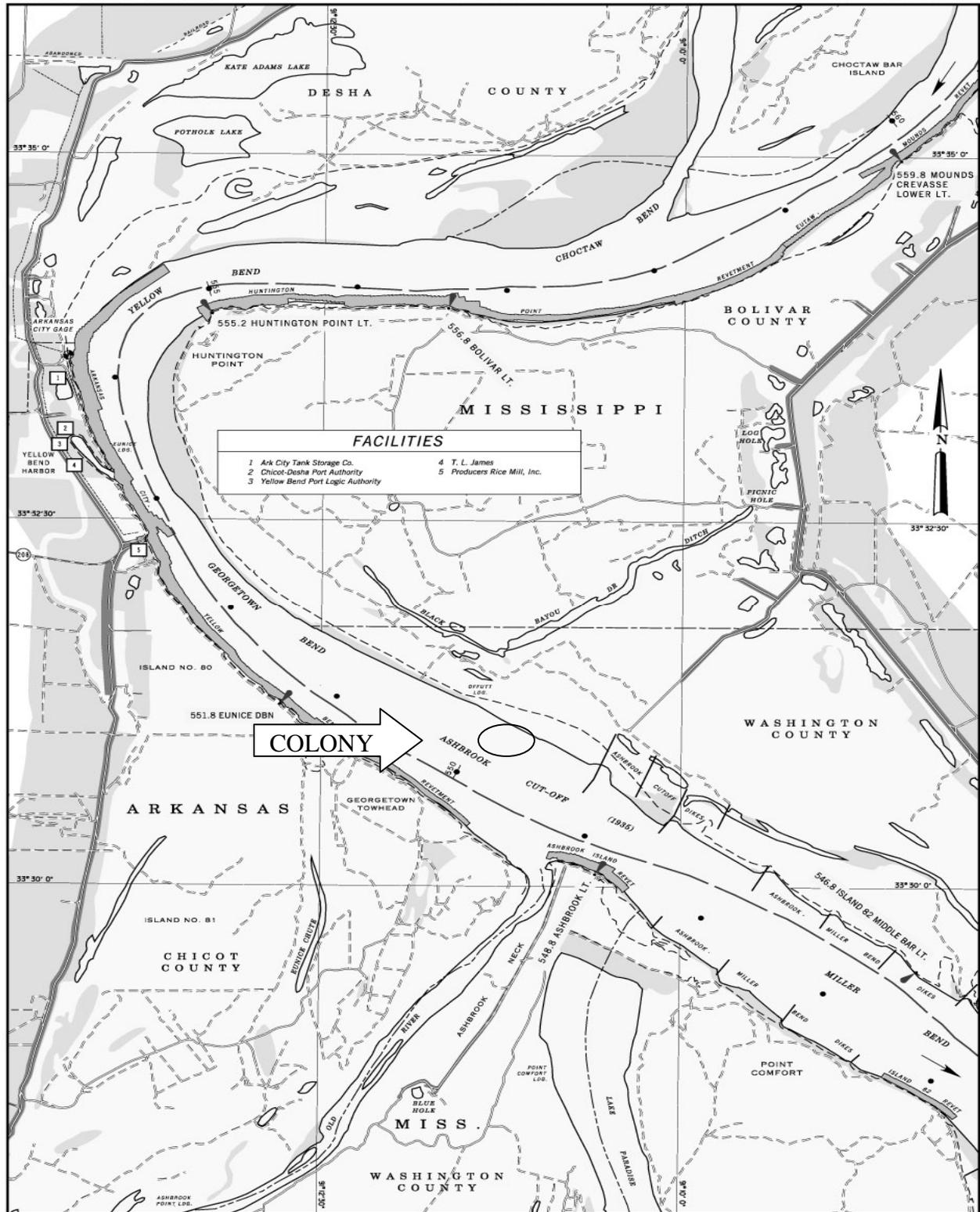
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1998

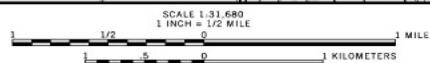
MAP NO. 78

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-32

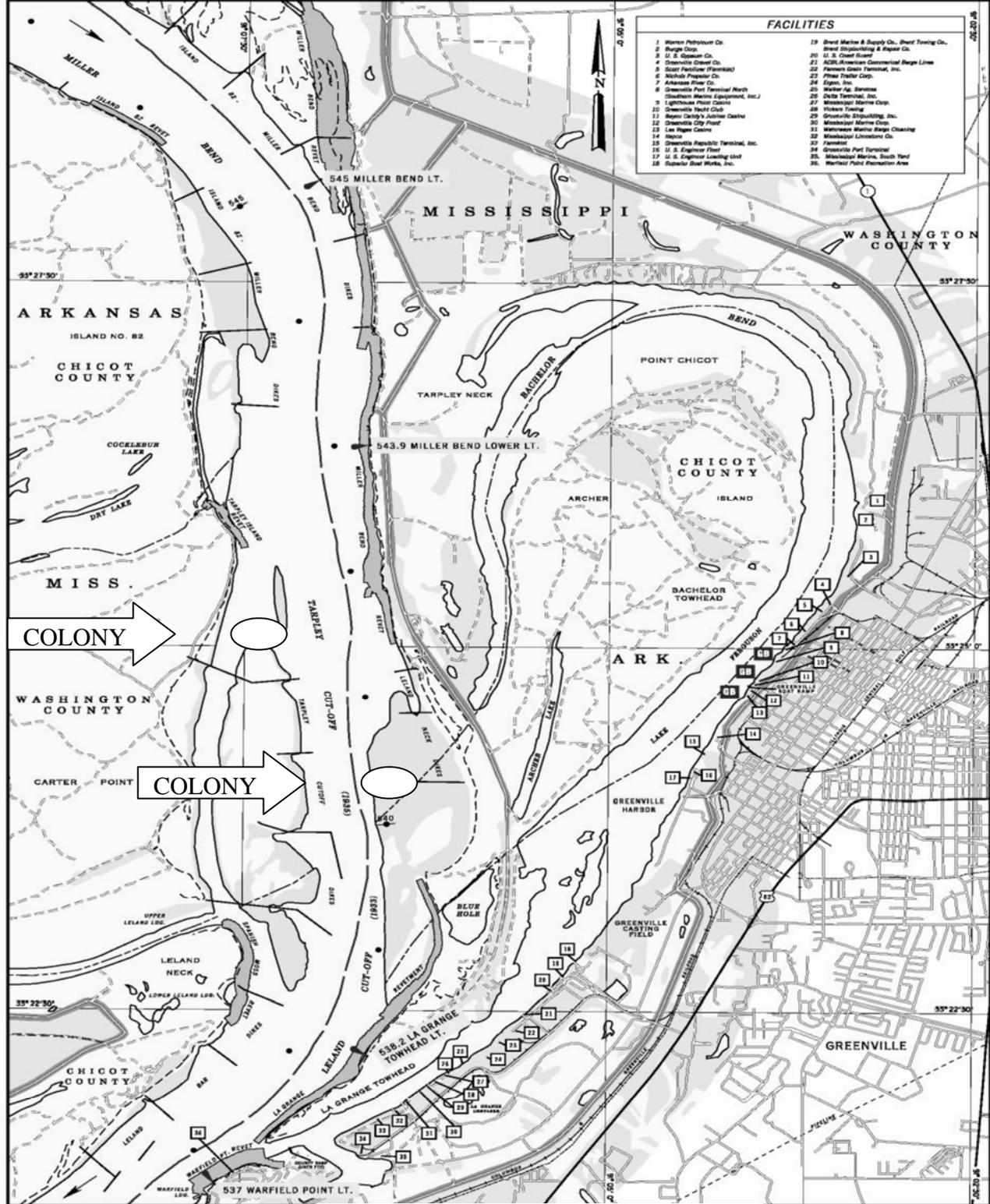


1998

MAP NO. 79



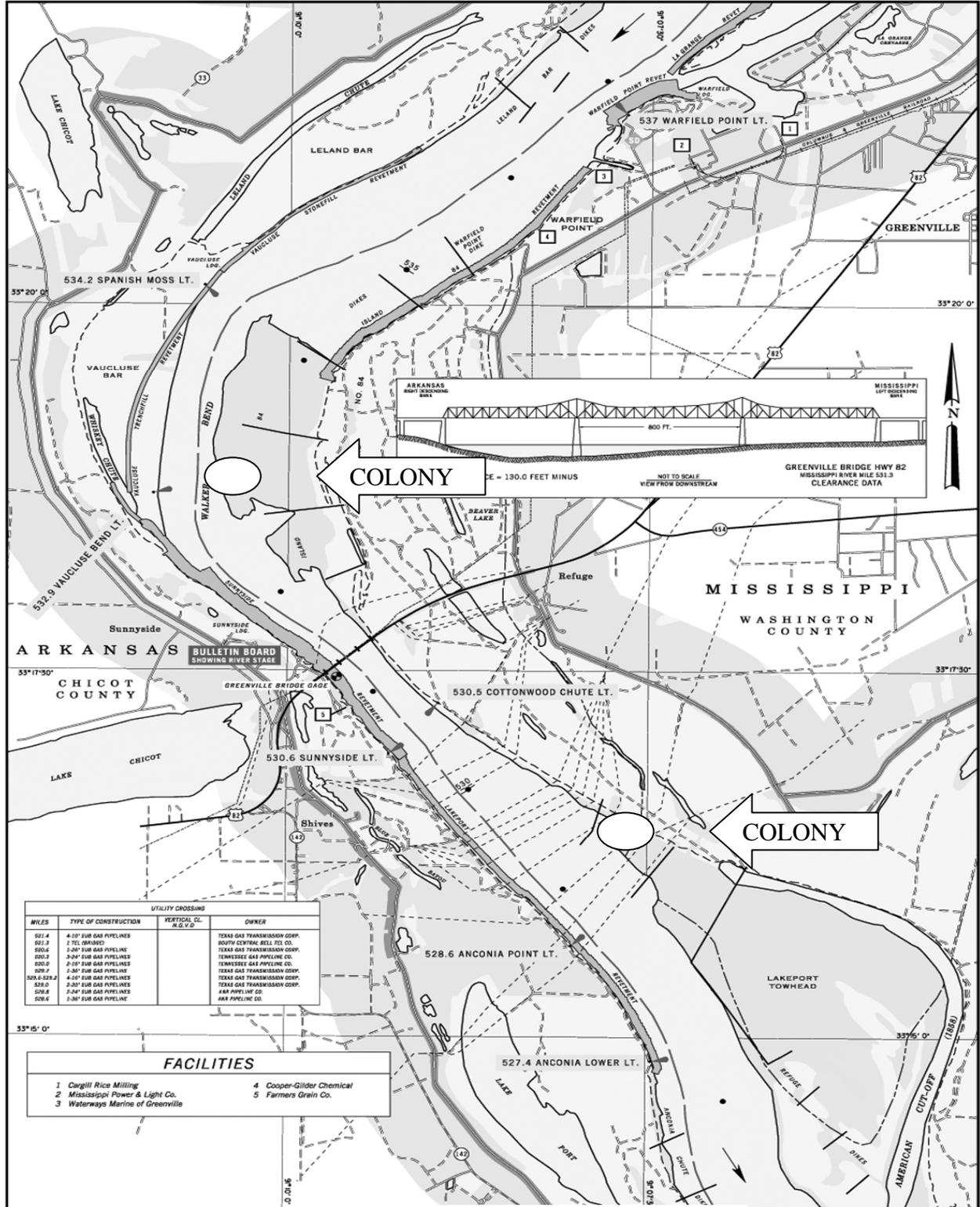
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-33



1998

MAP NO. 80

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-34



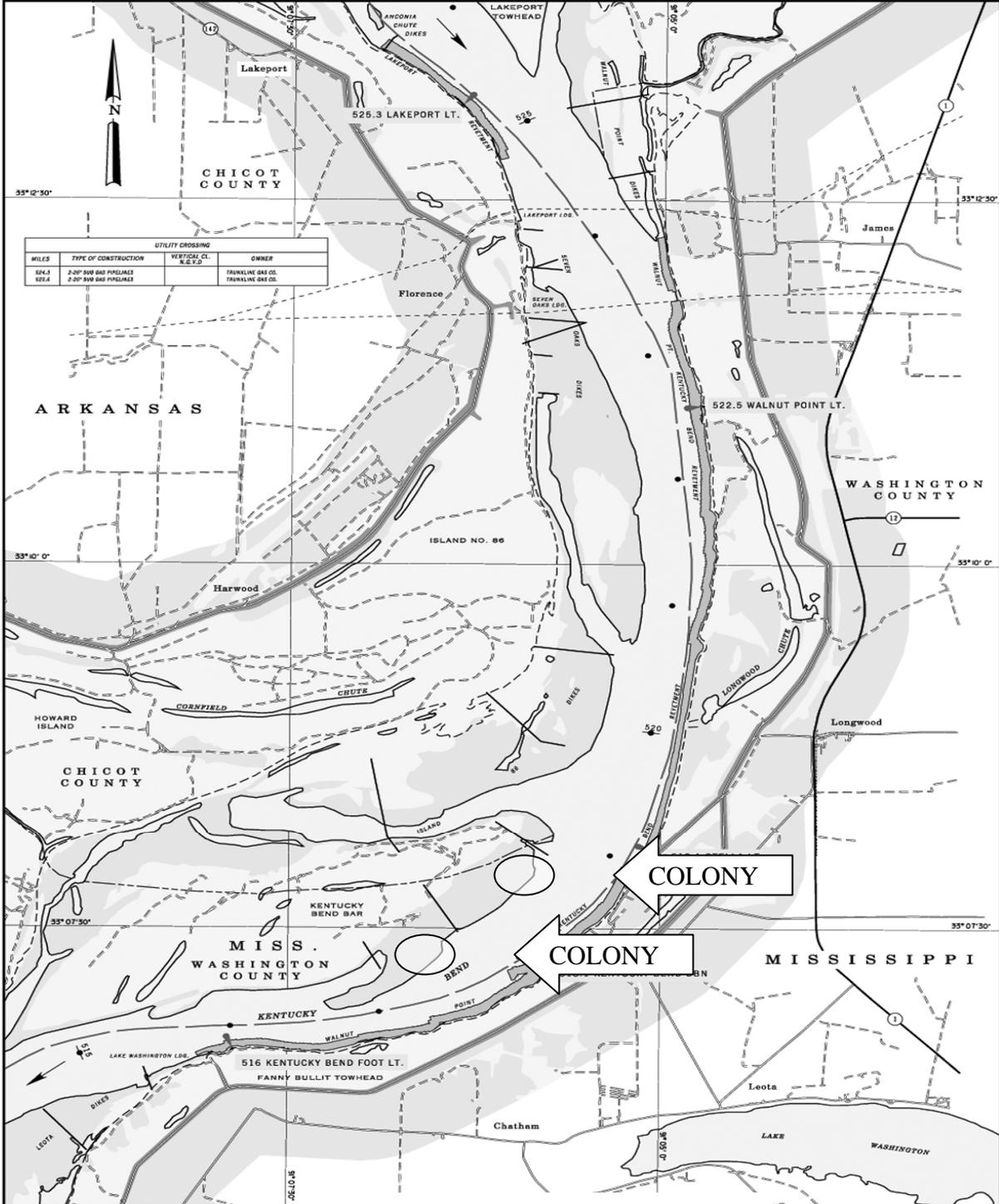
1998

MAP NO. 81

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-35

UTILITY CROSSING			
MILES	TYPE OF CONSTRUCTION	VERTICAL CL. H.G.T.D.	OWNER
621.4	4-10" SUR GAS PIPELINES		TEXAS GAS TRANSMISSION CORP.
621.7	1 TEL. CABLE		SOUTH CENTRAL BELL TEL. CO.
630.6	2-10" SUR GAS PIPELINE		TEXAS GAS TRANSMISSION CORP.
630.9	2-10" SUR GAS PIPELINES		TENNESSEE GAS PIPELINE CO.
630.9	2-10" SUR GAS PIPELINES		TENNESSEE GAS PIPELINE CO.
630.9	2-10" SUR GAS PIPELINES		TEXAS GAS TRANSMISSION CORP.
628.6, 629.2	4-10" SUR GAS PIPELINES		TEXAS GAS TRANSMISSION CORP.
628.2	2-10" SUR GAS PIPELINES		TEXAS GAS TRANSMISSION CORP.
628.8	2-10" SUR GAS PIPELINES		ARK. PIPELINE CO.
628.8	2-10" SUR GAS PIPELINE		ARK. PIPELINE CO.

FACILITIES	
1 Cargill Rice Milling	4 Cooper-Giddler Chemical
2 Mississippi Power & Light Co.	5 Farmers Grain Co.
3 Waterways Marine of Greenville	



1998

Least Tern Survey – 2005

MAP NO. 83

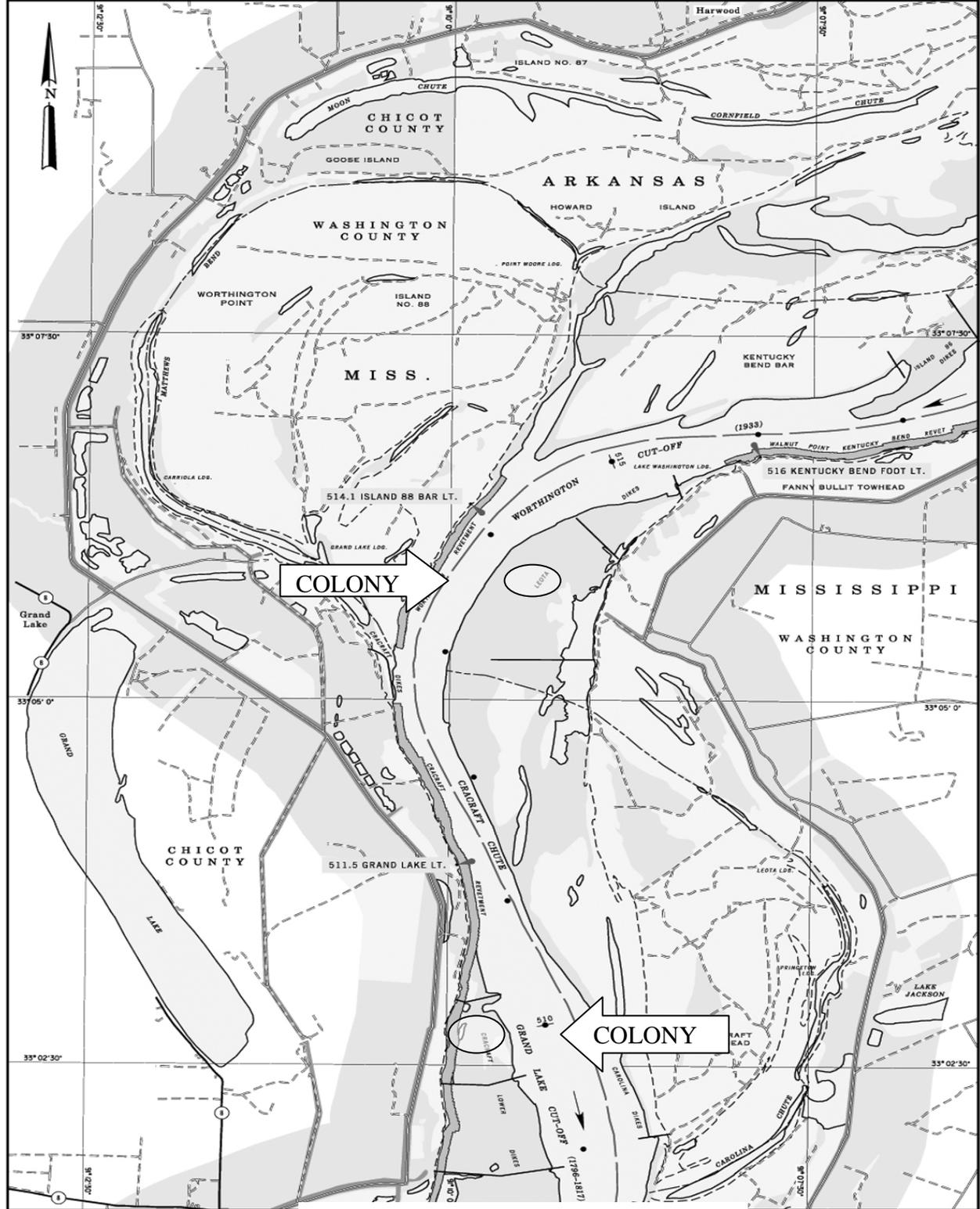
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

A-I-36



1998

Least Tern Survey – 2005

MAP NO. 84

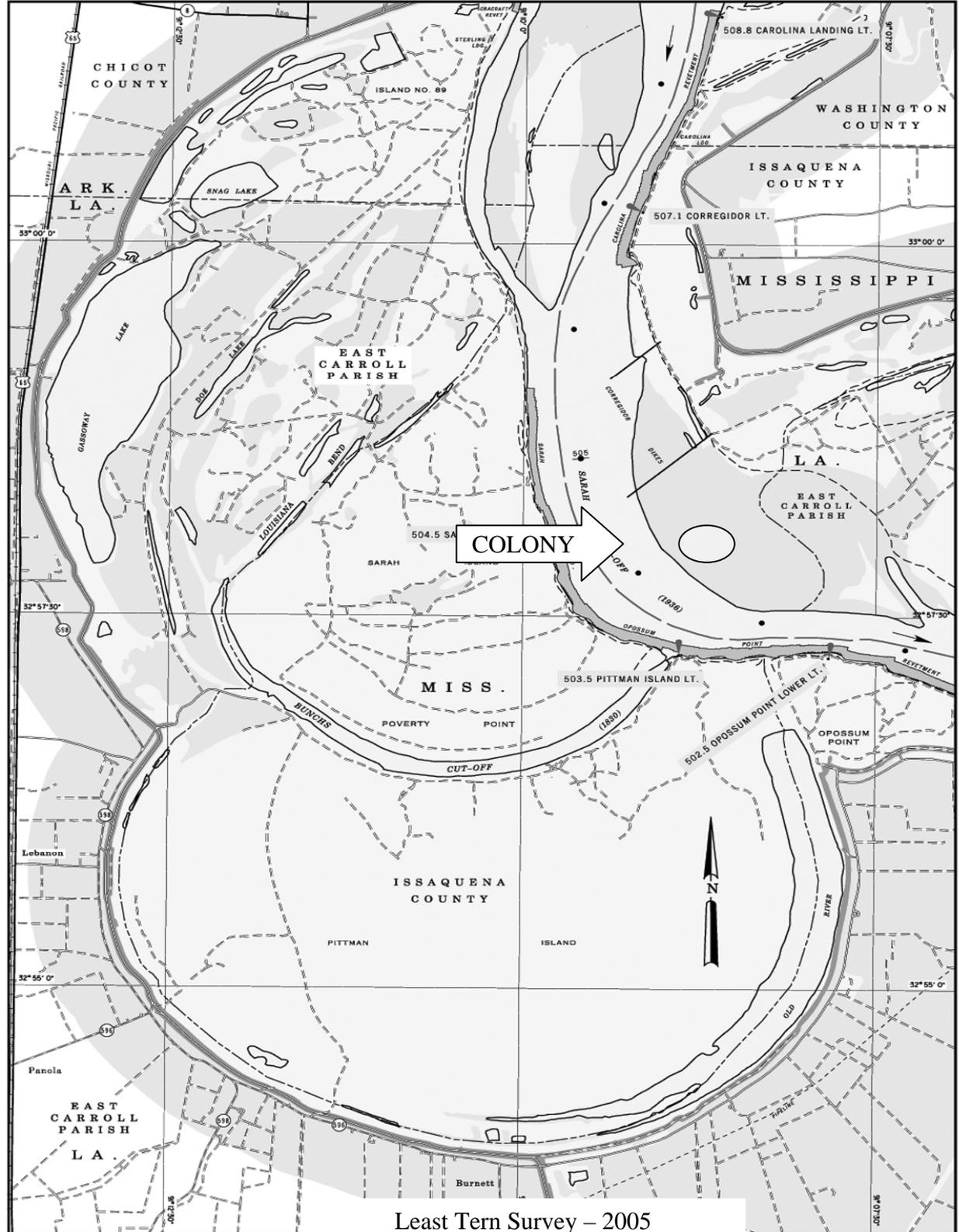
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

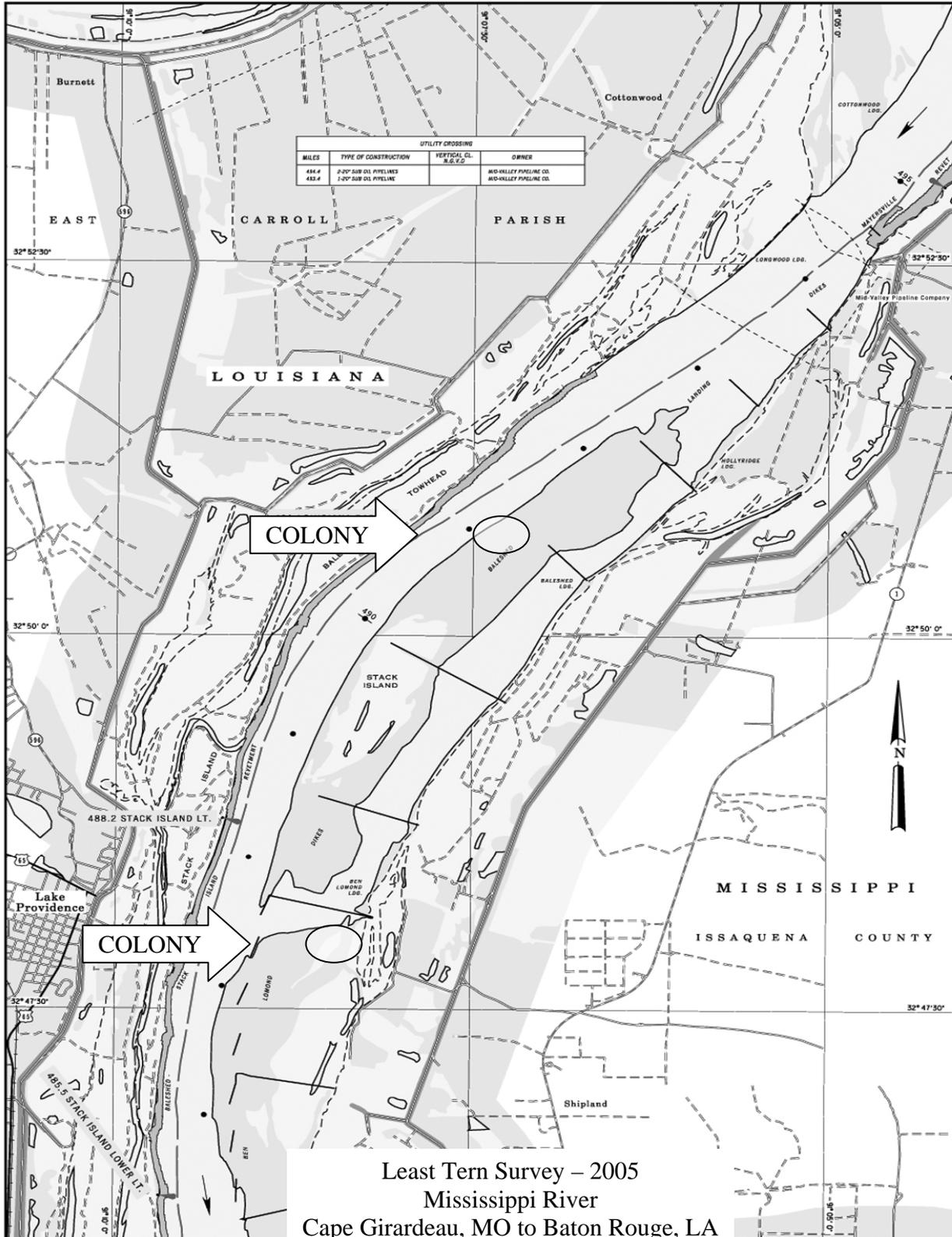
A-I-37



1998

MAP NO. 85

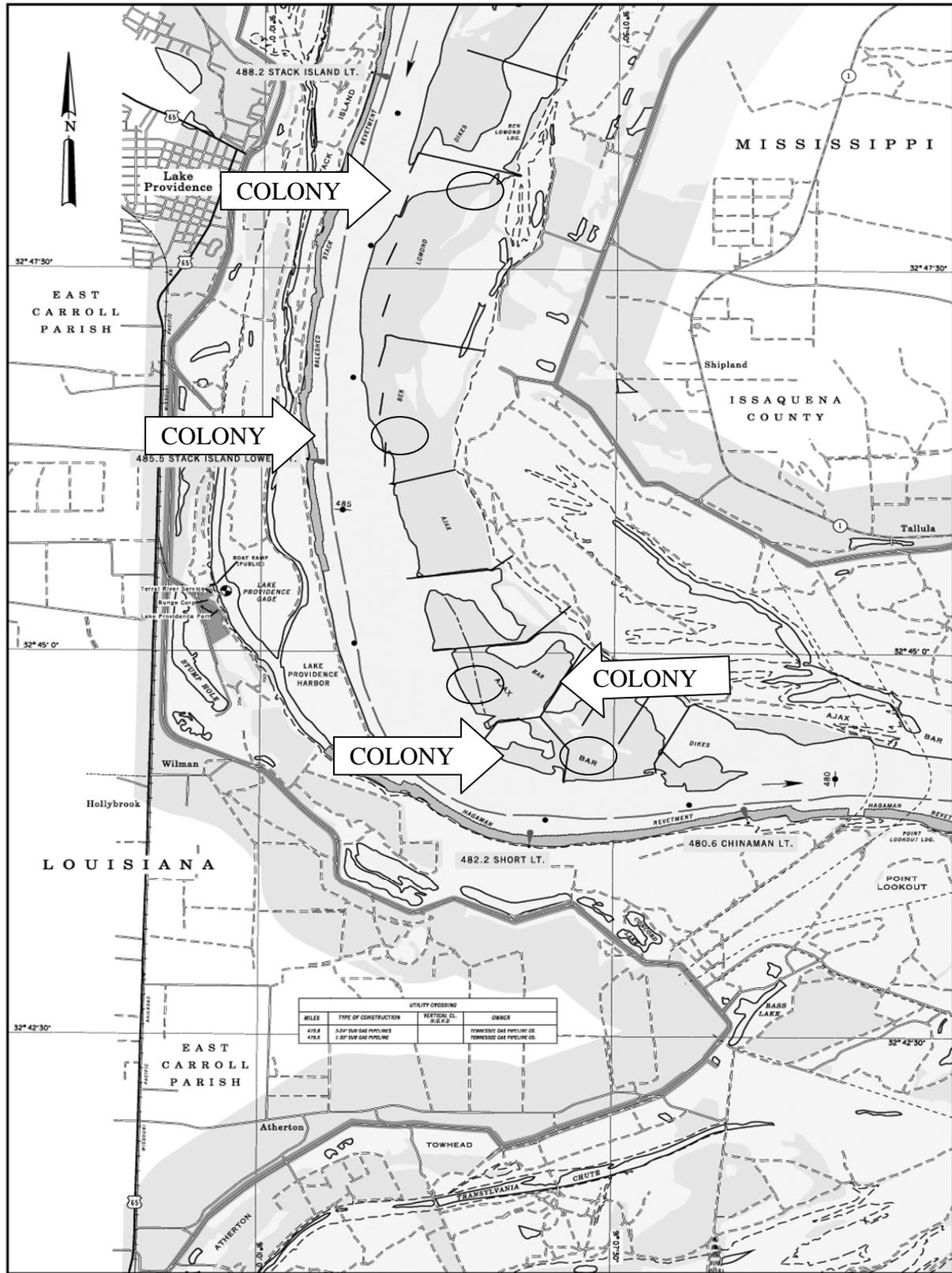
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-38



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-39

MAP NO. 87

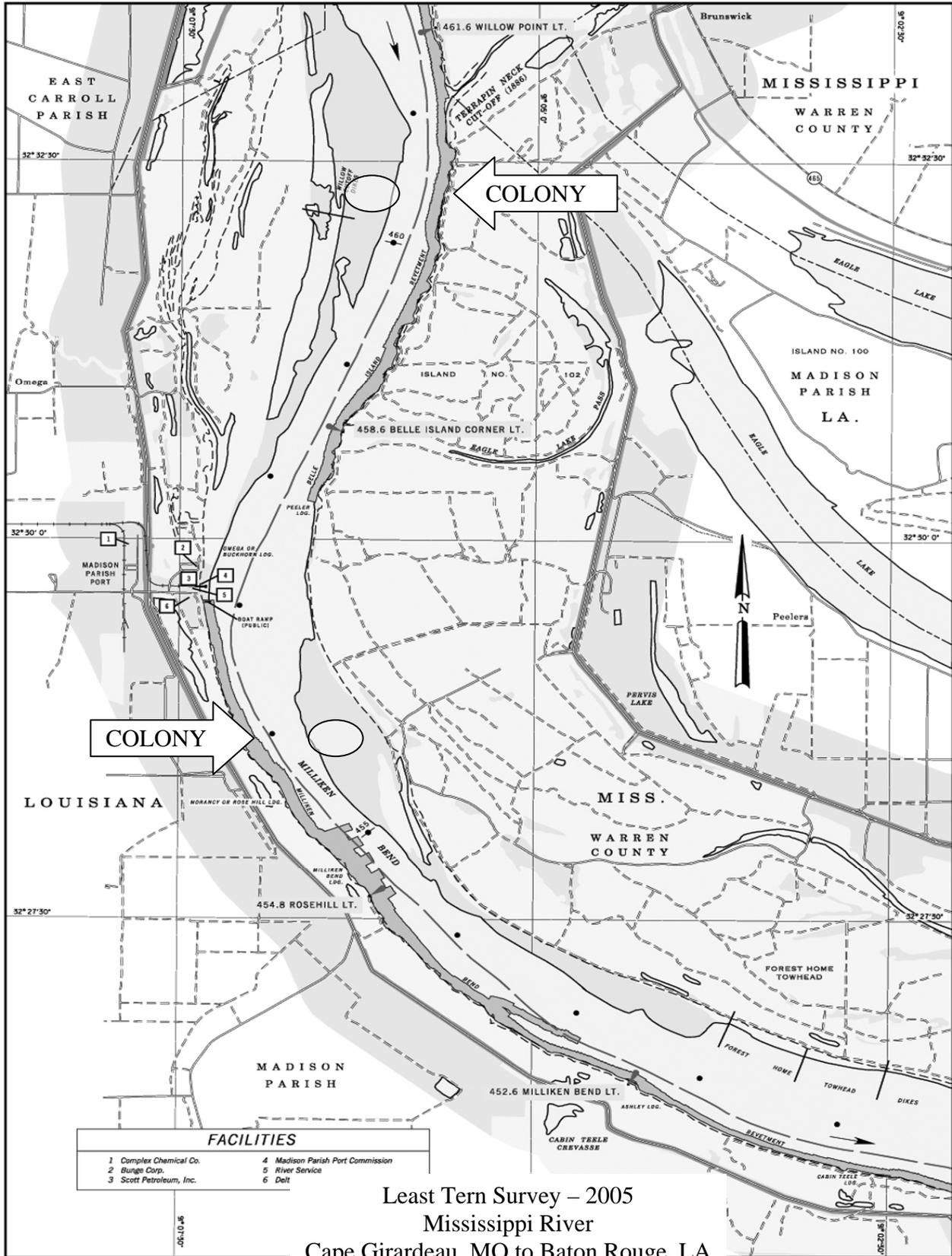


1998

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

MAP NO. 88

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-40



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-41

MAP NO. 92

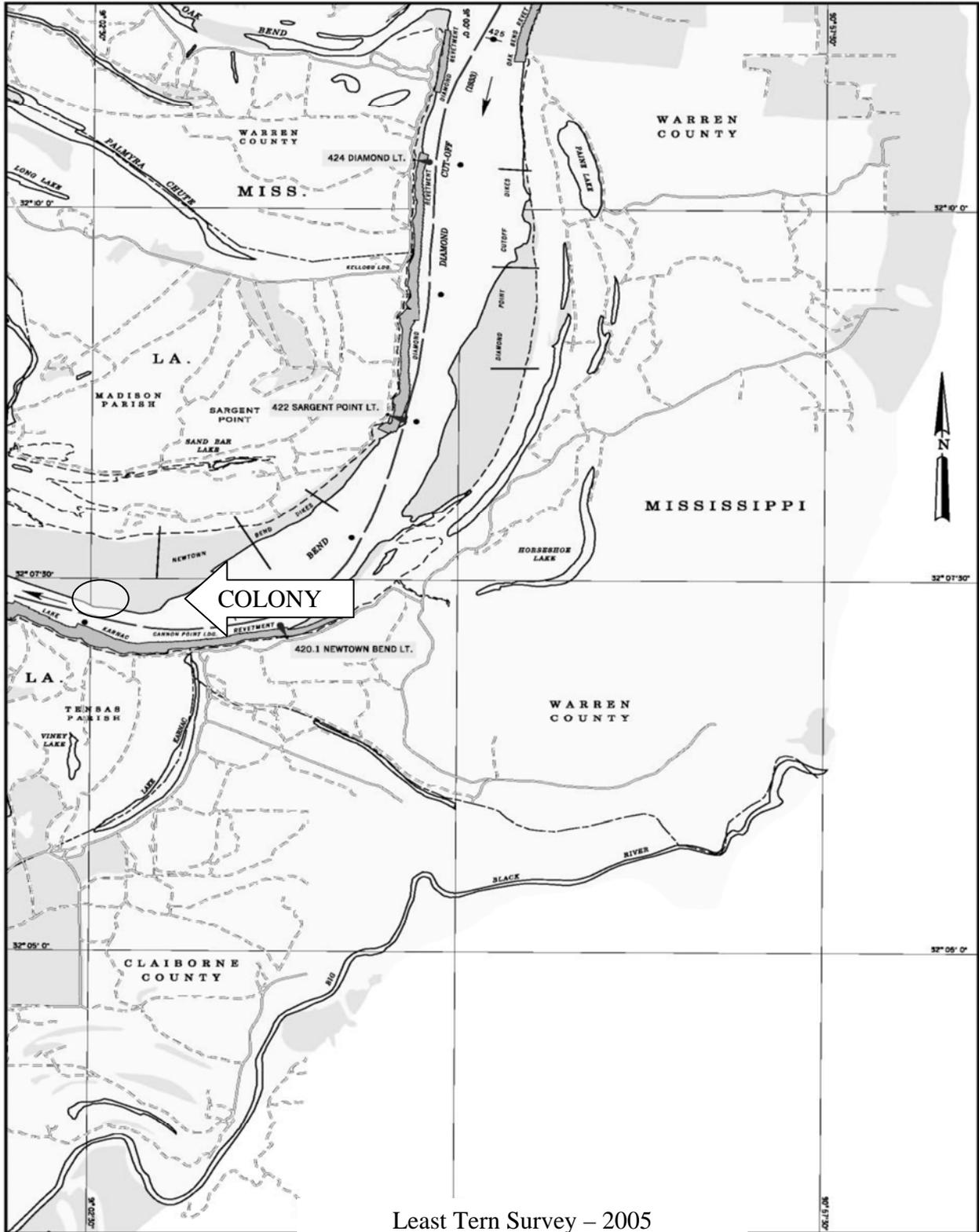


COLONY

1998

MAP NO. 96

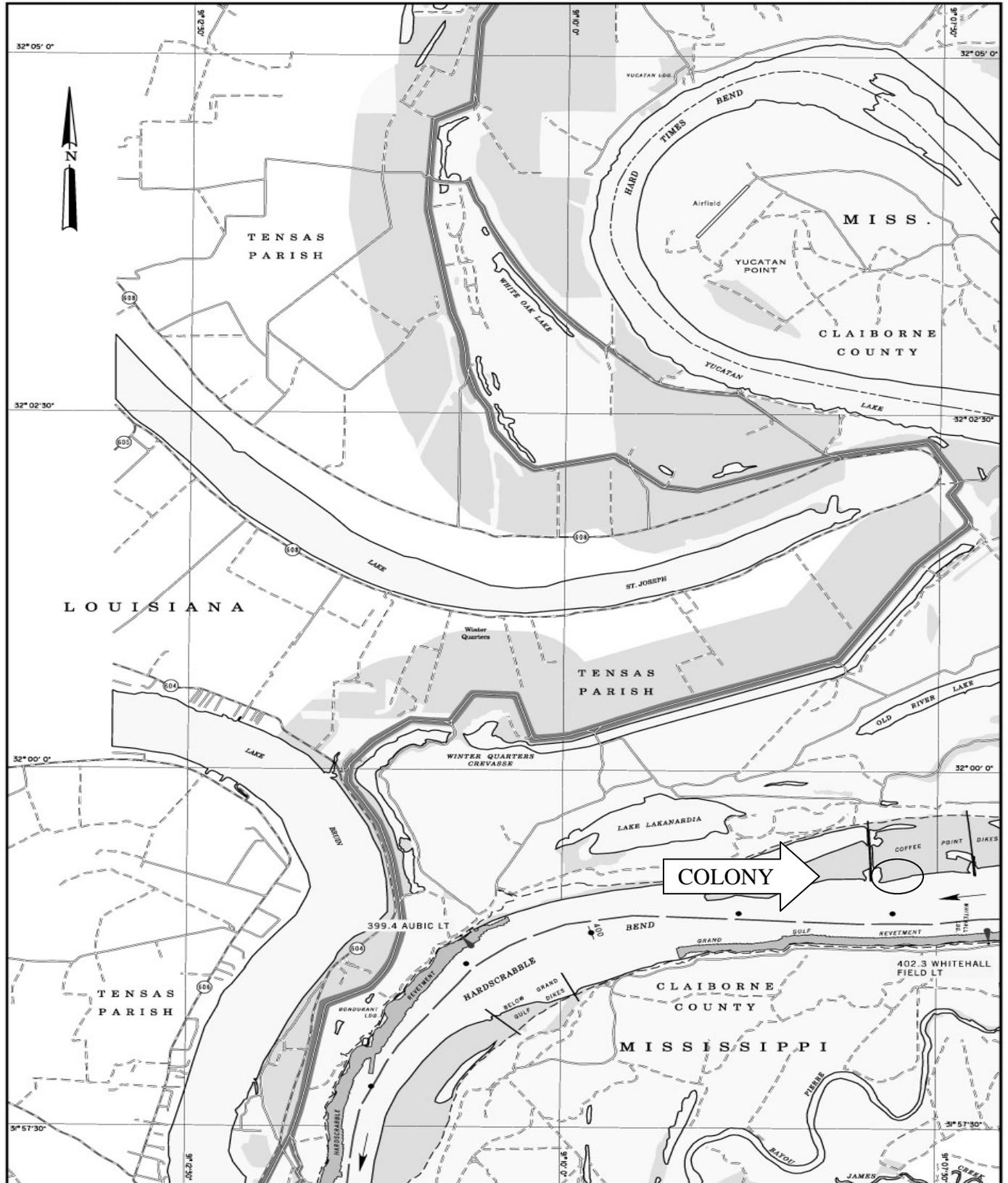
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-42



1998

MAP NO. 98

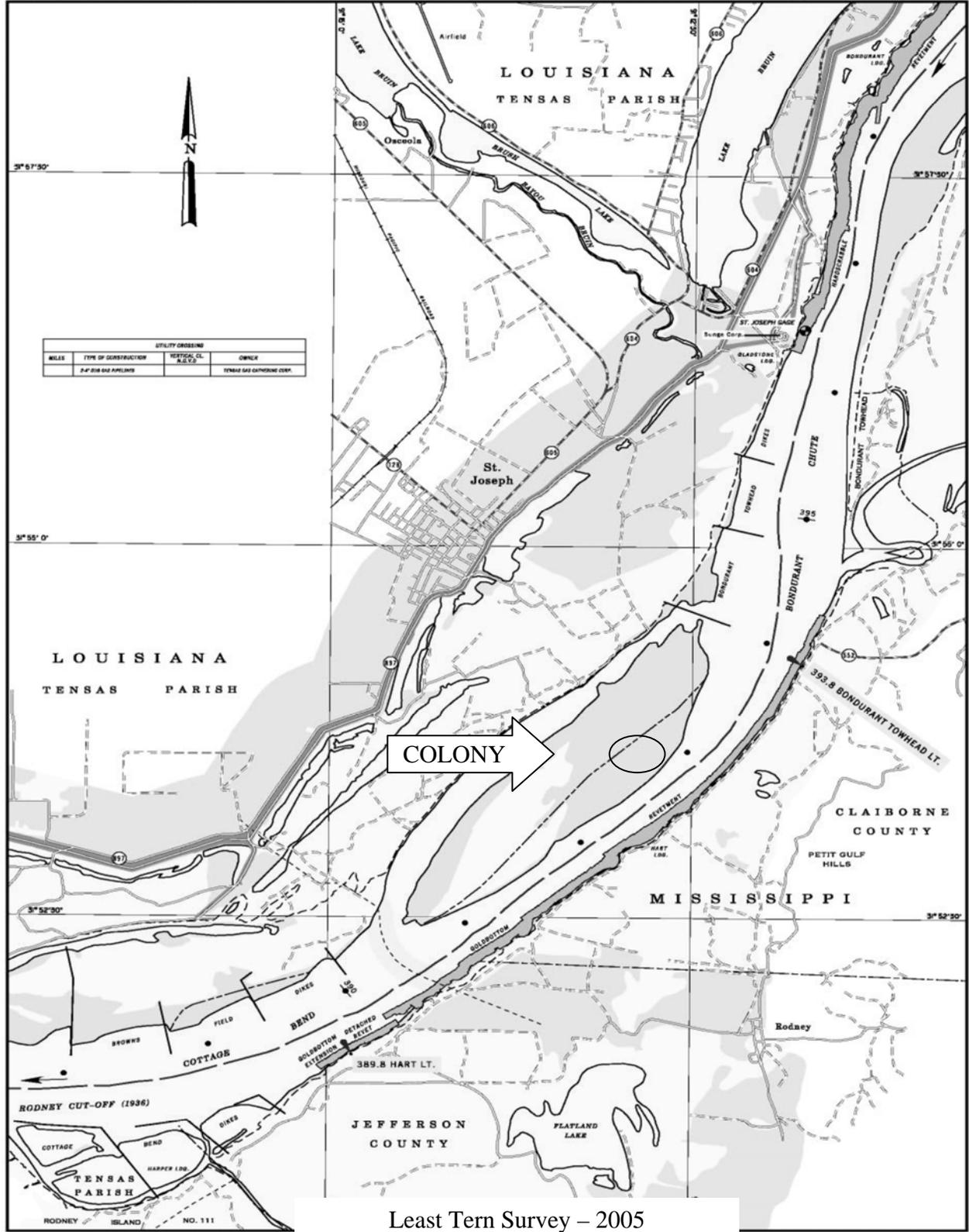
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-43



1998

MAP NO. 101

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-44



1998

MAP NO. 102

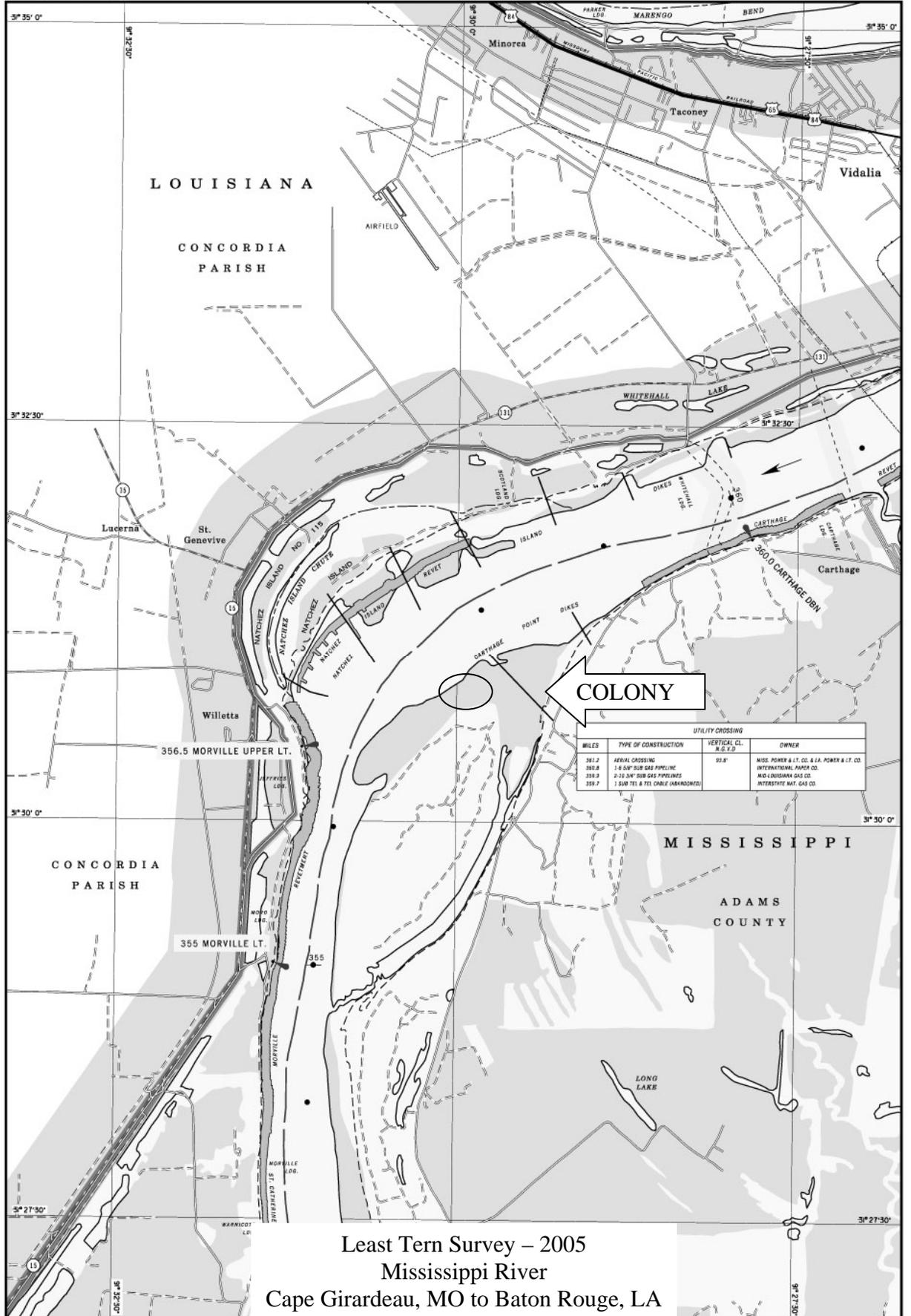
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-45



1998

MAP NO. 103

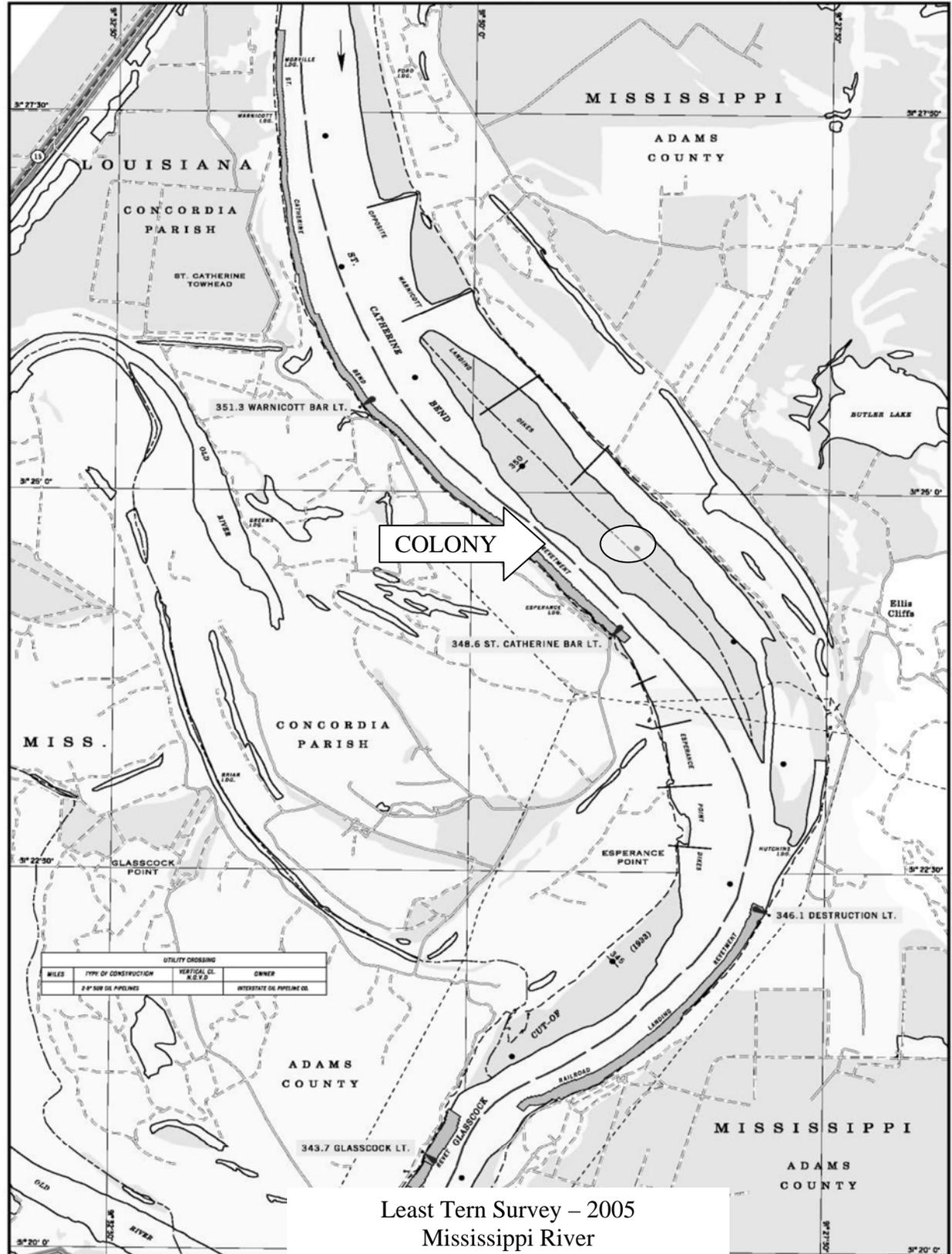
Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-46



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-47

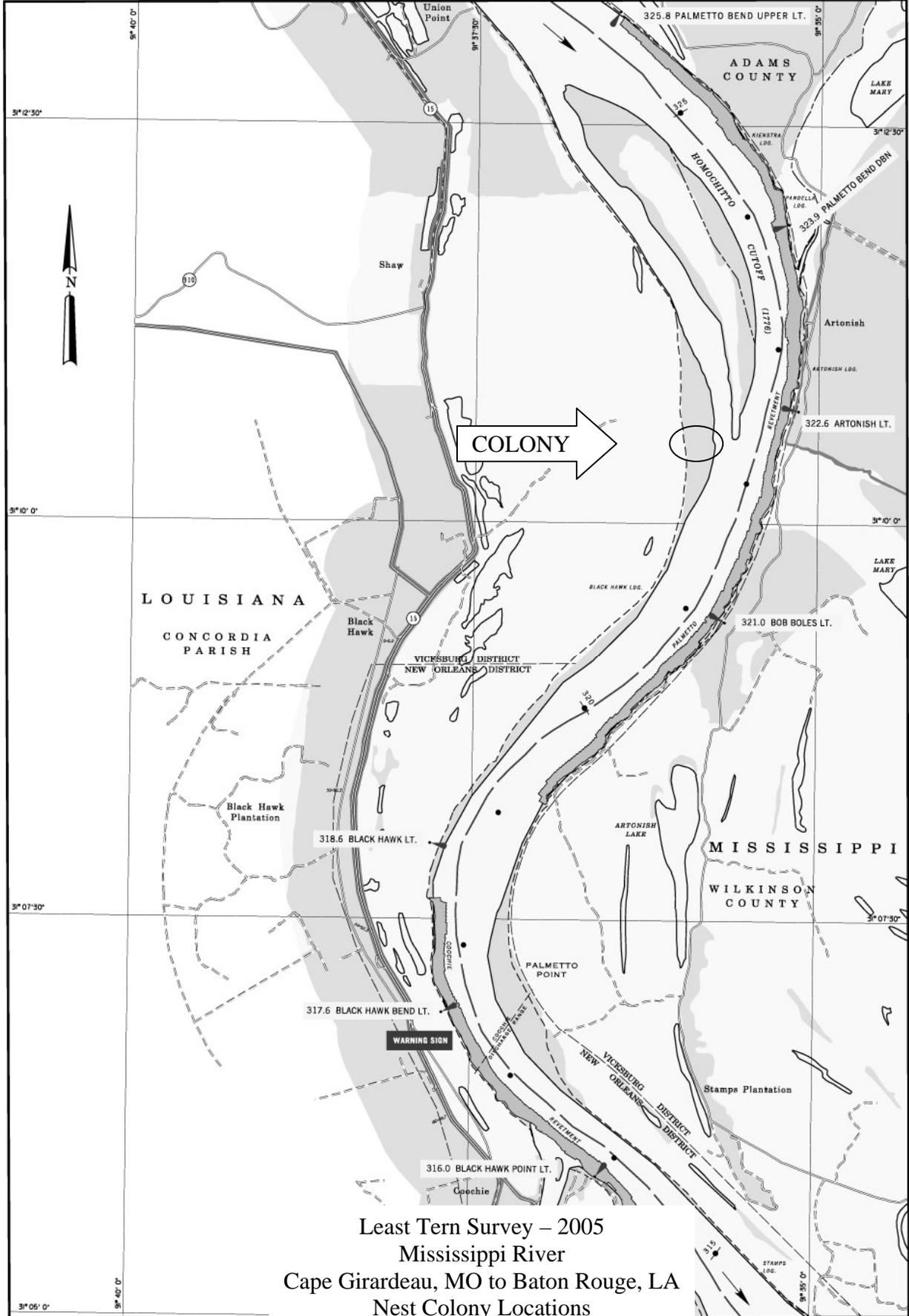
MAP NO. 107



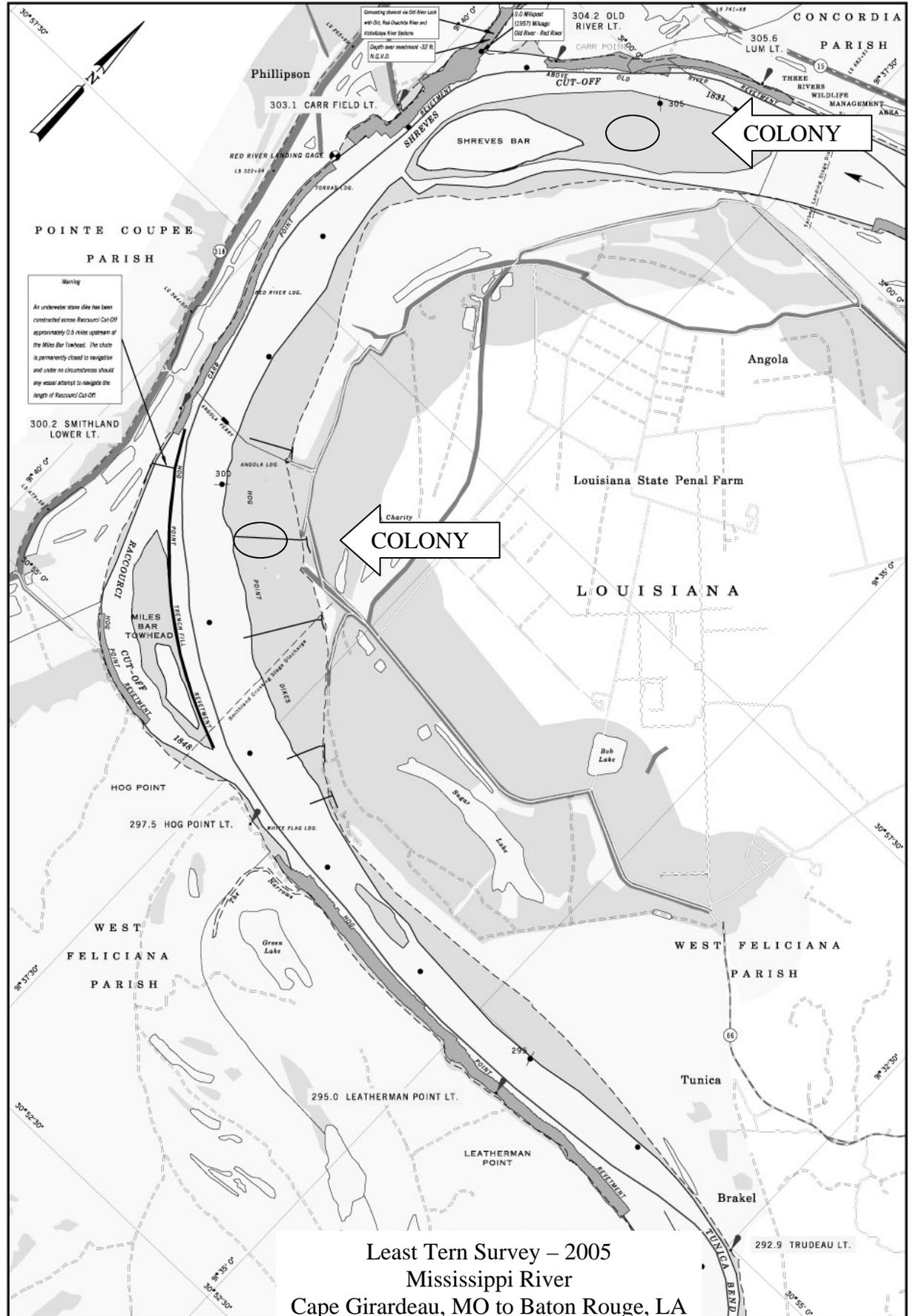
1998

MAP NO. 109

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-48



Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-49



1998

Least Tern Survey – 2005  
 Mississippi River  
 Cape Girardeau, MO to Baton Rouge, LA  
 Nest Colony Locations  
 Memphis District Corps of Engineers  
 A-I-50

MAP NO. 114

**Appendix A – II**

**LEAST TERN SURVEY - 2005**

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

**SMALL BOAT SURVEY June 25 – July 1, 2005**

**Memphis District, Corps of Engineers**

**Data Sheets**

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 8:15 RIVER MILE: UR 39.5

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

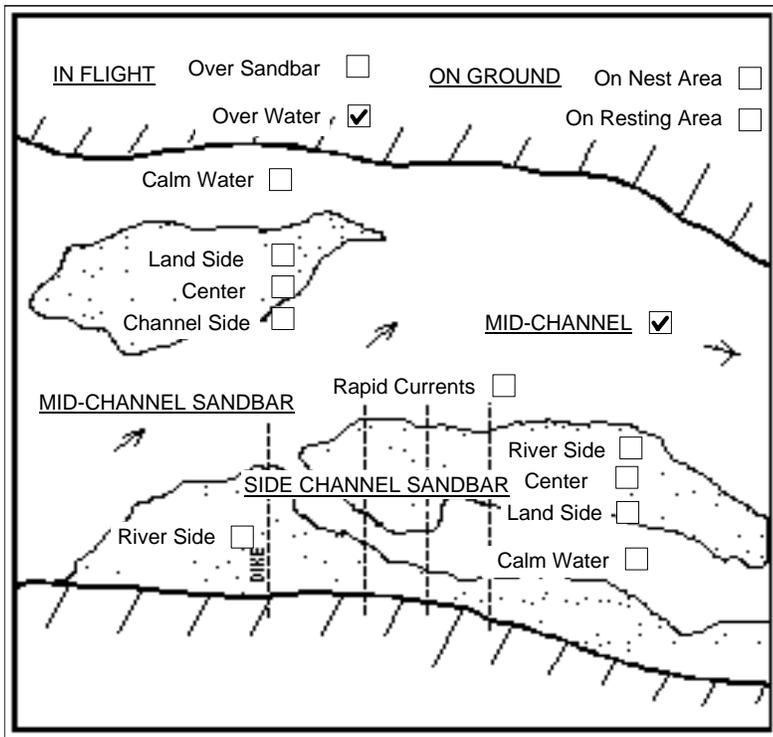
Approximate Distance to Water: 0 Feet

NUMBERS SIGHTED:  
Adults: 1  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: 0 Feet

FIELD CONDITION:  
Temperature: 82 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: haze



OTHER NOTES:  
One Tern flying mid-channel.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Ill side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, Leggett, Markham

RIVER GAGE READING: Cape Girardeau = 20.7 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 8:25 RIVER MILE: UR 35.5

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: 0 Feet

**NUMBERS SIGHTED:**

Adults: 5  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

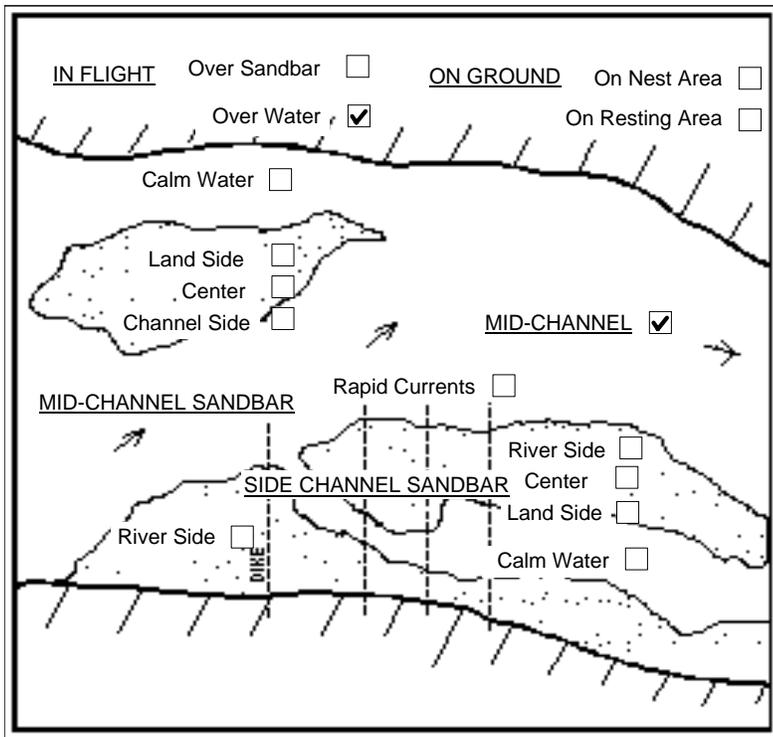
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: 0 Feet

**FIELD CONDITION:**

Temperature: 82 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: haze



**OTHER NOTES:**

Five Terns fishing mid-channel.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Ill side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, Moore, et al.

RIVER GAGE READING: Cape Girardeau = 20.7 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 8:33 RIVER MILE: UR 33.0

LOCALITY: Scott MO SITE NAME: Billings Island  
County/Parish State

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

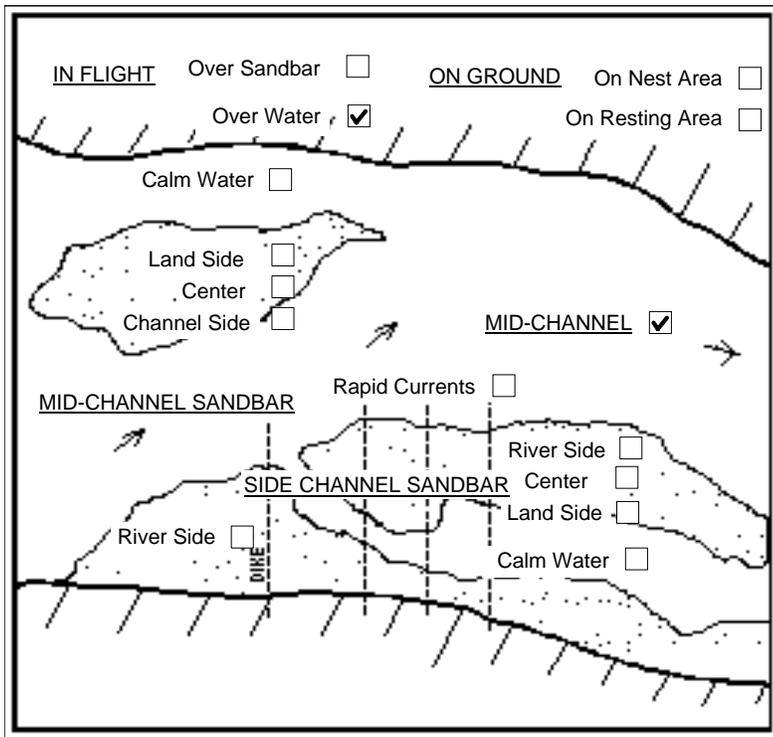
Approximate Distance to Water: 0 Feet

NUMBERS SIGHTED:  
Adults: 14  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: 0 Feet

FIELD CONDITION:  
Temperature: 83 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: haze



OTHER NOTES:  
Fourteen Terns flying mid-channel  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
MO side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cape Girardeau = 20.7 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 8:51 RIVER MILE: UR 30.4

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

WHERE SITED: Latitude: 37.0446  
Longitude: 89.3795

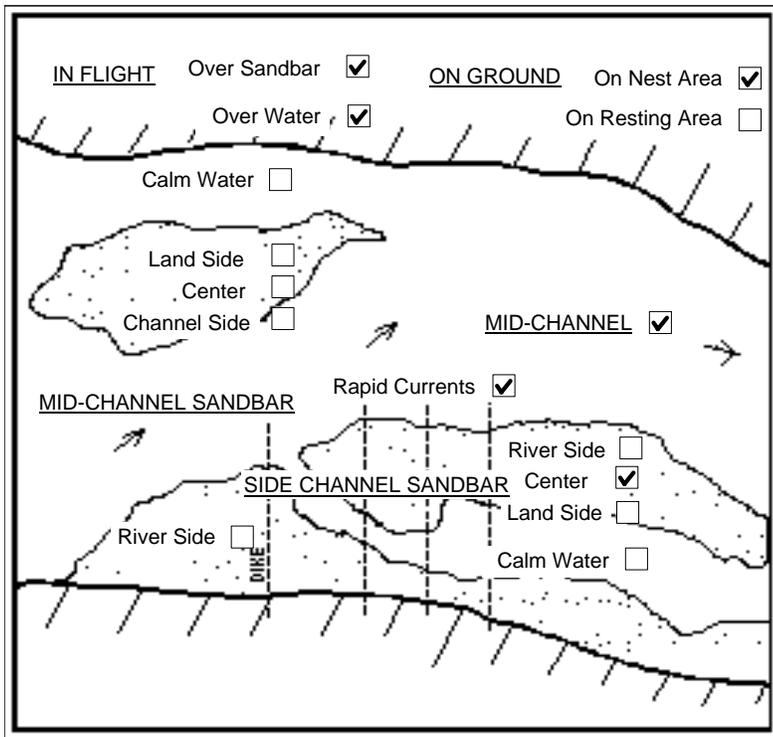
Approximate Distance to Water: 1000 Feet

NUMBERS SIGHTED:  
Adults: 72  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 7  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Hardwoods  
Distance: 3000 Feet

FIELD CONDITION:  
Temperature: 84 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: haze



OTHER NOTES:

Left Bank. Unattached, small, gently sloping, sand bar with gravel patches. Nests along center of bar.  
Most birds courting or resting at waterline. No human signs or other animal tracks. Nests in sand and  
gravel. Birds fishing on both sides, 12 on opposite bank. Twelve Killdeer observed and mussel shells  
collected. One Osprey observed 1-2 miles downstream.

ILL side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cape Girardeau = 20.7 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 10:42 RIVER MILE: 946.0

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

WHERE SITED: Latitude: 36.8899  
Longitude: 89.1171

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 44  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 3  
Chicks: No

SUBSTRATE:

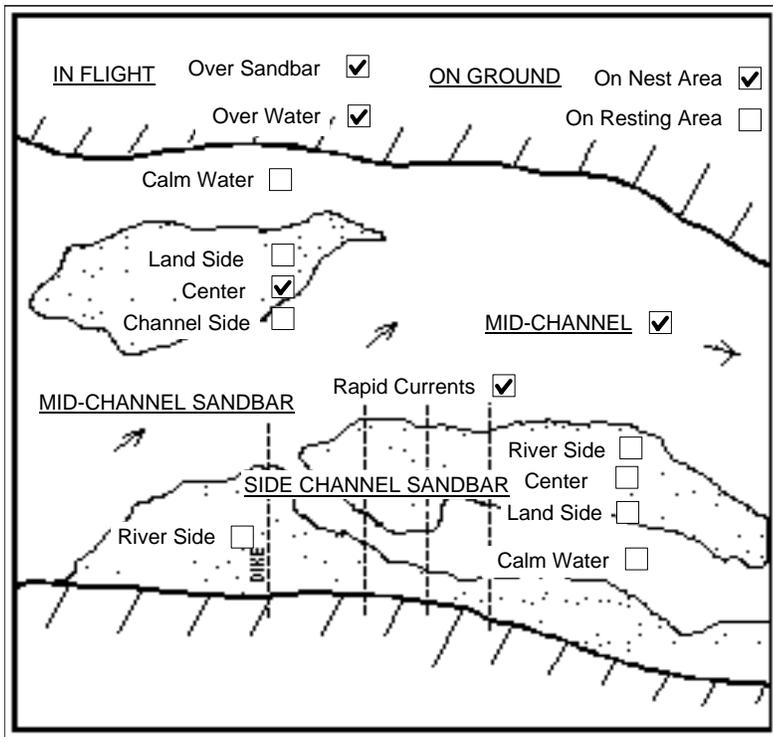
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 84 °F  
Rain: No  
Wind: S 5-10 mph  
% Cloud: haze



OTHER NOTES:

Left Bank. Long, low, unattached bar of sand, some gravel and mud on chute side. Colony about 1 mile in length. Nests along ridge lines center of bar. Behavior indicates young colony. Light mobbing and many resting at waterline. Turtle tracks only sign of disturbance.

KY side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cairo = 19.2 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 11:36 RIVER MILE: 940.0

LOCALITY: Carlisle KY SITE NAME: Below Campbell Dikes  
County/Parish State

WHERE SITED: Latitude: 36.8013  
Longitude: 89.1311

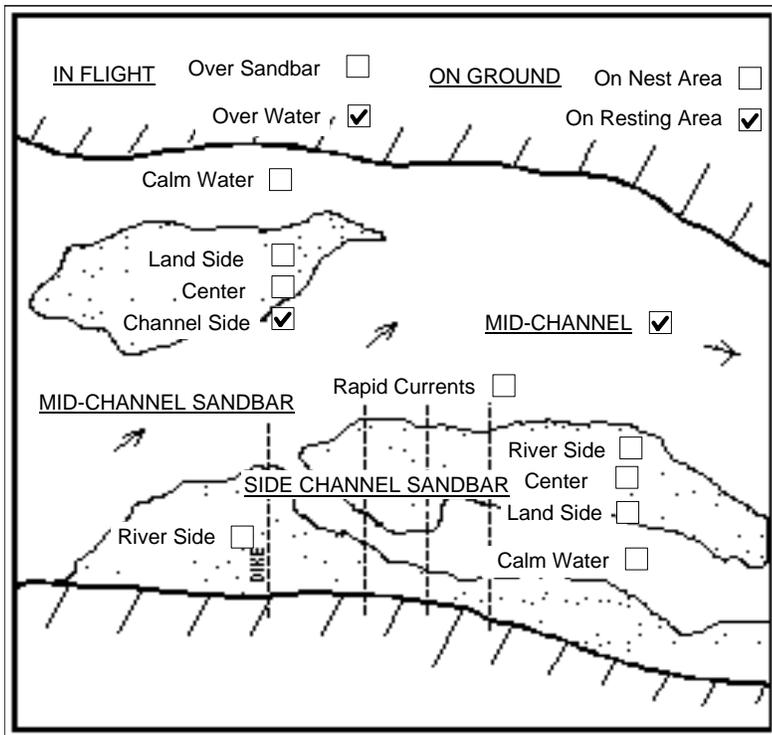
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 11  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 84 °F  
Rain: No  
Wind: S 5-10 mph  
% Cloud: 20 haze



OTHER NOTES:

Left Bank. Very small recently emergent bars with 4 resting at waterline, 7 flying mid-channel.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
KY side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cairo = 19.2 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 12:10 RIVER MILE: 930.5

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

WHERE SITED: Latitude: 36.6884  
Longitude: 89.1479

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 505  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 22  
Chicks: Yes

**SUBSTRATE:**

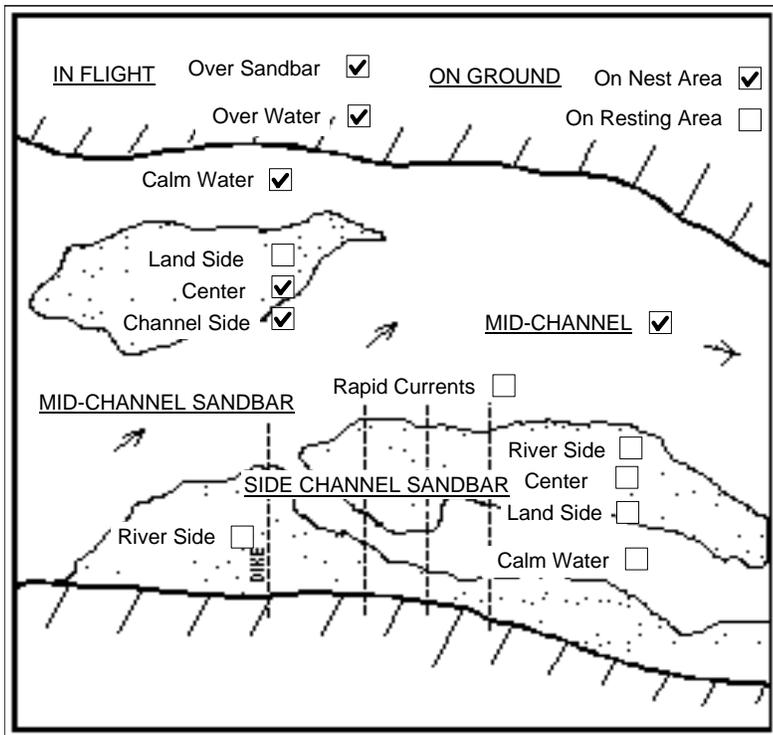
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Sparse grass  
Distance: 0 Feet

**FIELD CONDITION:**

Temperature: 90 °F  
Rain: No  
Wind: S 5-10 mph  
% Cloud: 30 haze



**OTHER NOTES:**

Left Bank. Large, mid-channel, flat-topped, high bar with ripple lines. Nests concentrated along high, mid-line of bar's center to downstream point with colony 3/4 mile in length. Chicks hatching or 1 day old.  
Breasting, feeding and courtship behavior on all sides. Human tracks abundant along with green marbles next to at least 5 nests, possible monitored colony? Morone (sp?) fingerling. Two Caspian Terns 2.5 miles downstream.  
KY side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cairo = 19.2 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 13:45 RIVER MILE: 920.5

LOCALITY: Mississippi MO SITE NAME: Hickman Bend  
County/Parish State

WHERE SITED: Latitude: 36.5692  
Longitude: 89.2374

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 192  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 14  
Chicks: Yes

SUBSTRATE:

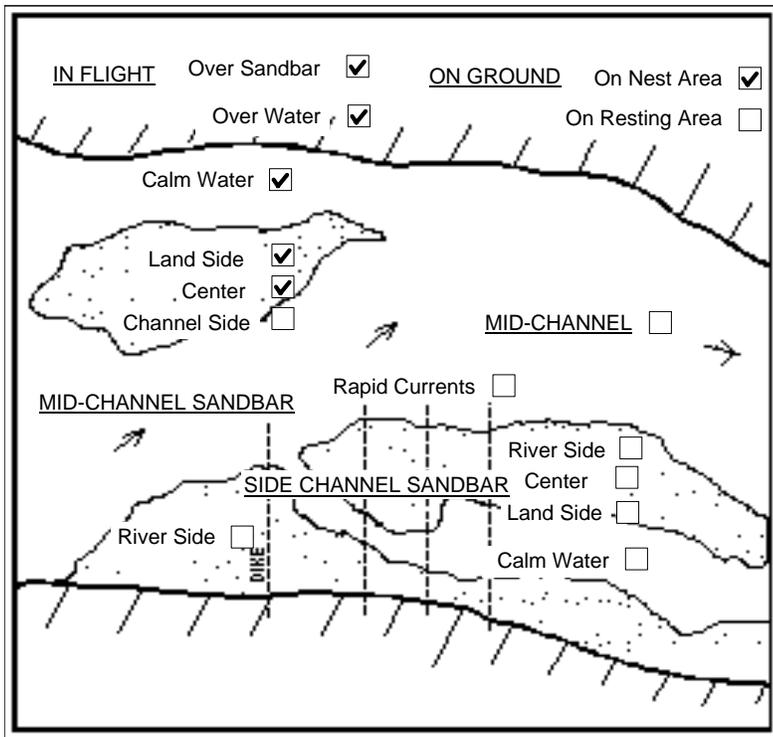
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 94 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 30



OTHER NOTES:

Right Bank. Medium size, low, rippled, sand bar with nests on mounded high points and prominent wrack line. Chicks up to 2 days old. Five adults fishing on opposite bank. Human, turtle, and 3 separate snake tracks. Dead chick, cause unknown, collected for DNA. Fifty swallows also observed on bar.

MO side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cairo = 19.2 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 14:30 RIVER MILE: 908.0

LOCALITY: Fulton KY SITE NAME: Island #6  
County/Parish State

WHERE SITED: Latitude: 36.5475  
Longitude: 89.3989

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 6  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

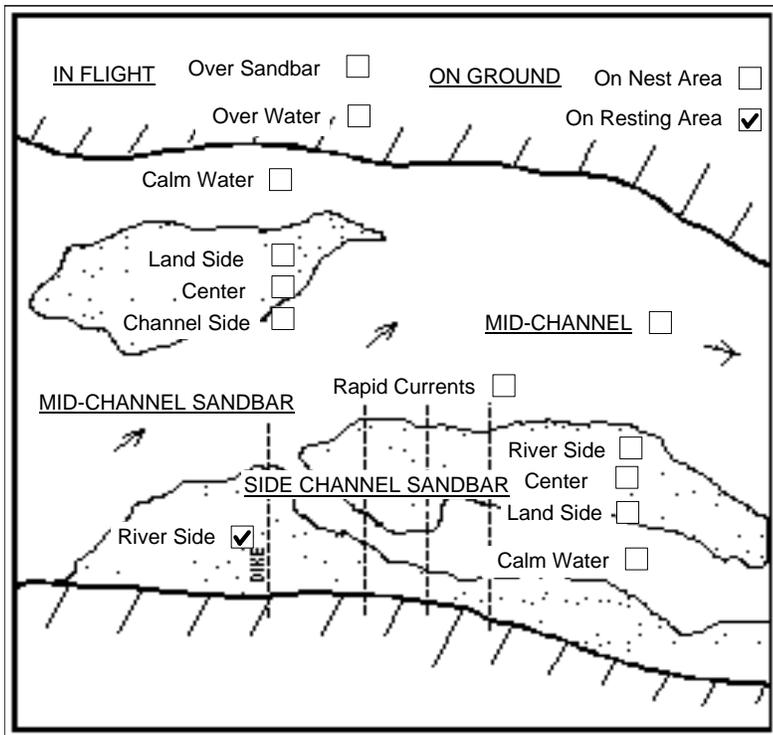
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Hardwoods  
Distance: 1500 Feet

**FIELD CONDITION:**

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



**OTHER NOTES:**

Left Bank. Resting bar attached to bank.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ KY side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Cairo = 19.2 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 14:57 RIVER MILE: 894.0

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

WHERE SITED: Latitude: 36.5179  
Longitude: 89.4673

Approximate Distance to Water: 700 Feet

**NUMBERS SIGHTED:**

Adults: 29  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

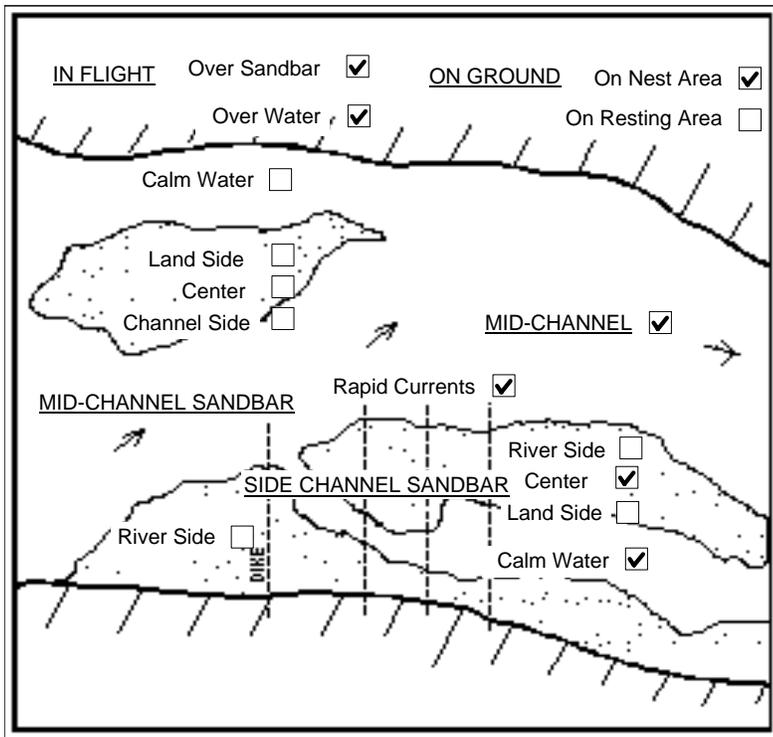
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 500 Feet

**FIELD CONDITION:**

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



**OTHER NOTES:**

Right Bank. Medium size sand bar with most birds resting or flying along waterline, carrying fish, courting, and light mobbing of observers. Canid tracks among empty scrapes, but no eggs indicate possible predation.

MO side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al

RIVER GAGE READING: New Madrid = 10.1 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 15:31 RIVER MILE: 887.5

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

WHERE SITED: Latitude: 36.6653  
Longitude: 89.5460

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 21  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 7  
Chicks: No

**SUBSTRATE:**

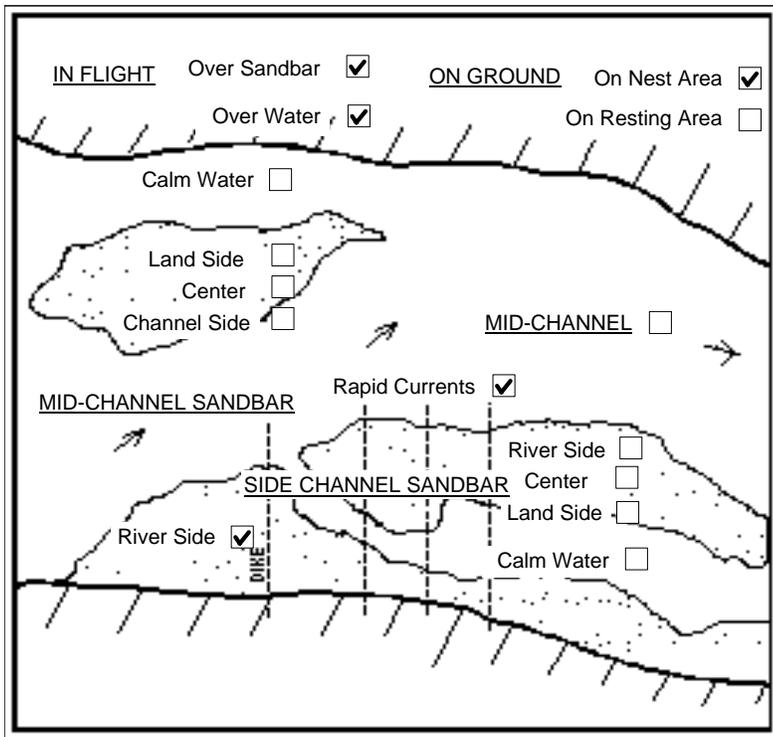
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 300 Feet

**FIELD CONDITION:**

Temperature: 94 °F  
Rain: No  
Wind: S 5-7 mph  
% Cloud: 10



**OTHER NOTES:**

Left Bank. Attached sand bar behind trailer dike's downstream end. Seven birds observed from boat setting on scrapes. Breasting, feeding, and resting along waterline. Dog tracks also visible.

KY side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: New Madrid = 10.1 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 15:55 RIVER MILE: 884.0

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

WHERE SITED: Latitude: 36.5199  
Longitude: 89.5028

Approximate Distance to Water: 300 Feet

**NUMBERS SIGHTED:**

Adults: 140  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 8  
Chicks: No

**SUBSTRATE:**

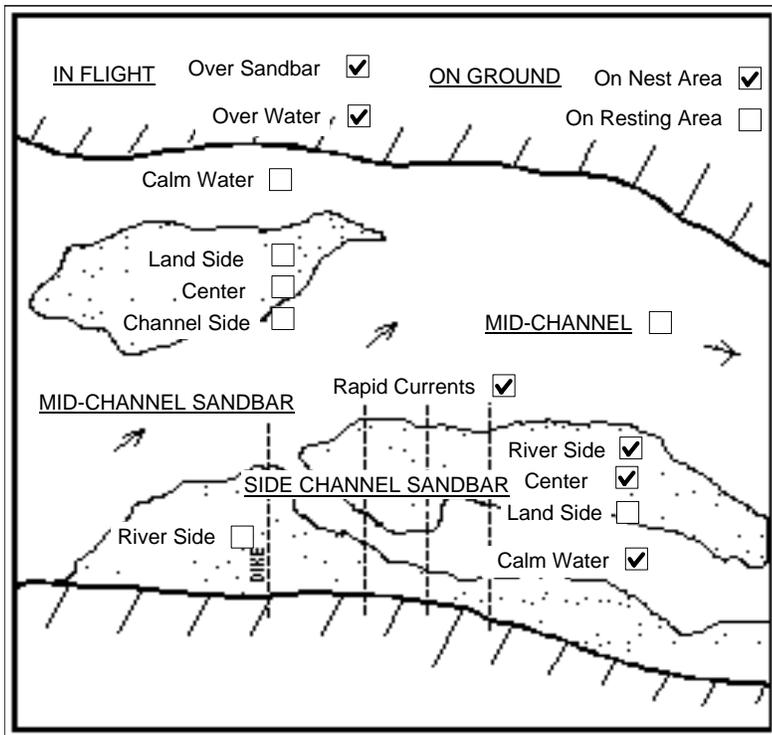
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 94 °F  
Rain: No  
Wind: S 5-7 mph  
% Cloud: 10



**OTHER NOTES:**

Left Bank. Large, long, high, flat, sand bar with high downstream point. Waterline count of 61 with 8 nests observed by debris. Colony 1 1/2 mile long following wrack line. Birds breasting both sides. Two sets of coyote tracks. Last year colony was split into two, but counted as one this year.

KY side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: New Madrid = 10.1 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 16:50 RIVER MILE: 880.5

LOCALITY: New Madrid MO SITE NAME: Island #11 Dikes  
County/Parish State

WHERE SITED: Latitude: 36.4721  
Longitude: 89.5230

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 60  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 3  
Chicks: No

SUBSTRATE:

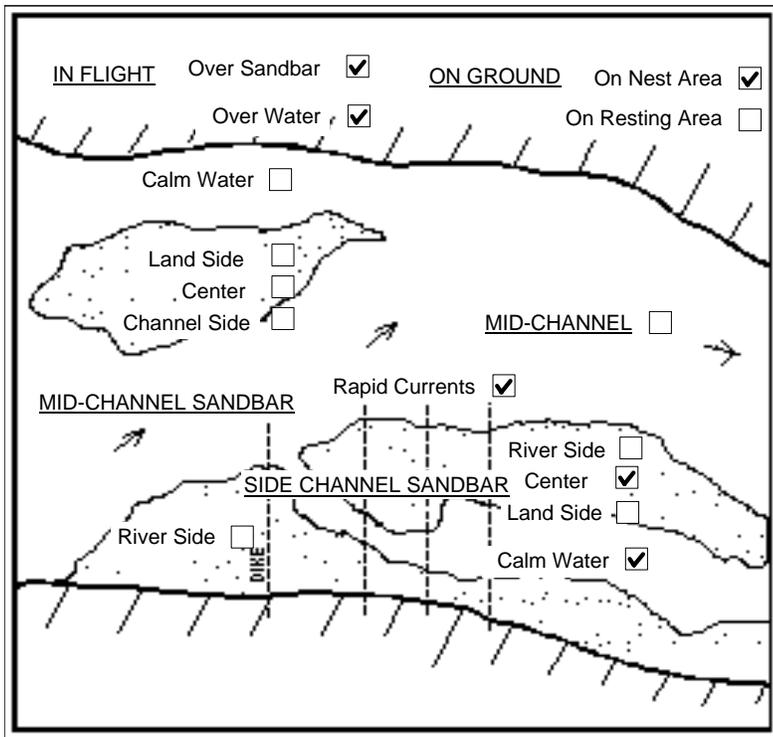
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: 0 Feet

FIELD CONDITION:

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



OTHER NOTES:

Right Bank. Low, flat, sand bar, unattached at least most of lower reach. Swift, shallow currents mandated drift count only. Three Terns observed setting on scrapes. Many breasting, courting and fishing both sides. No disturbance or tracks observed from a distance.

MO side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al

RIVER GAGE READING: New Madrid = 10.1 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 17:07 RIVER MILE: 876.0

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

WHERE SITED: Latitude: 36.4184  
Longitude: 89.5363

Approximate Distance to Water: 300 Feet

**NUMBERS SIGHTED:**

Adults: 30  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 2  
Chicks: No

**SUBSTRATE:**

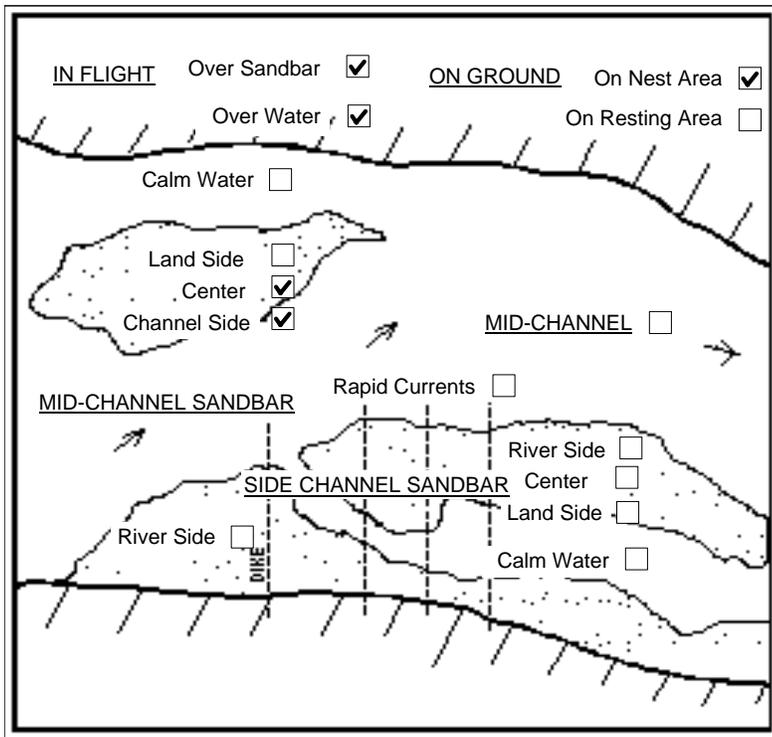
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 93 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 10



**OTHER NOTES:**

Left Bank. Partially attached, low, undulating, sand bar with most terns resting at waterline. Terns seen carrying fish but only 2 observed setting. No eggs found, but mobbing of crow observed and Tree Swallow observed attacking a Least Tern. No signs of disturbance or tracks.

TN side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Caruthersville = 13.1 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 17:30 RIVER MILE: 871.5

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

WHERE SITED: Latitude: 36.3529  
Longitude: 89.5274

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 144  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 3  
Chicks: No

**SUBSTRATE:**

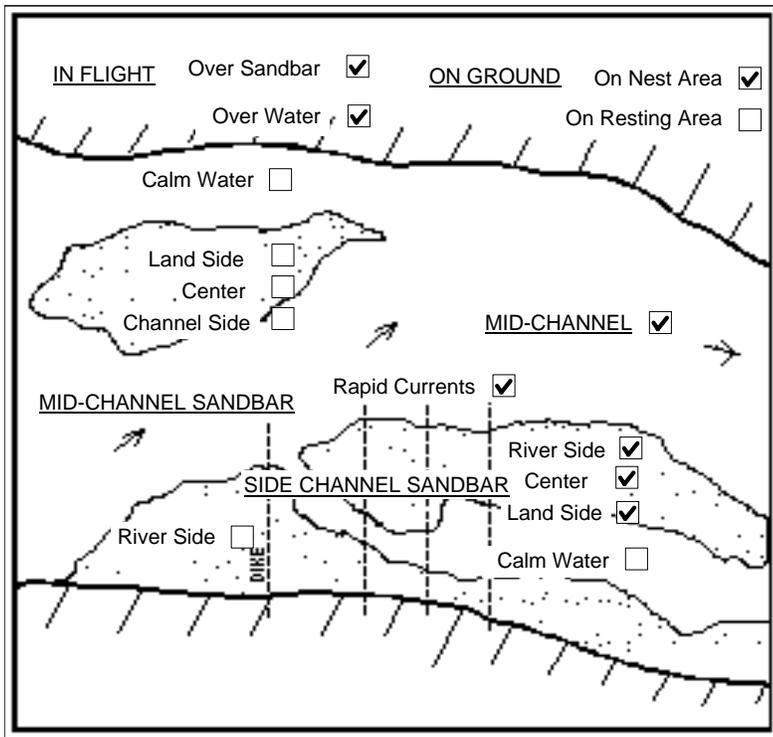
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 100 Feet

**FIELD CONDITION:**

Temperature: 93 °F  
Rain: No  
Wind: S 5-7 mph  
% Cloud: 10



**OTHER NOTES:**

Right Bank. Long, narrow, high, unattached bar with packed mud. Immature Bald Eagle resting with fish just upstream. Great Blue Heron tracks, but no other disturbance evident. Mussel shell collected.

MO side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Caruthersville = 13.1 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/25/2005 TIME OF DAY: 18:00 RIVER MILE: 870.0

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

WHERE SITED: Latitude: 36.3447  
Longitude: 89.5297

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 420  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 26  
Chicks: Yes

SUBSTRATE:

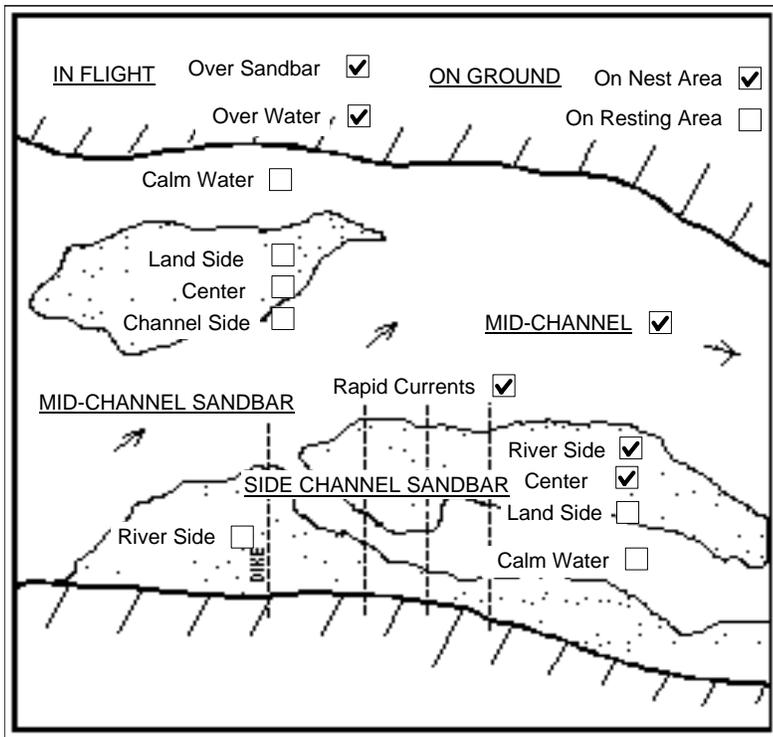
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 93 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 10



OTHER NOTES:

Right Bank. Downstream point of 2 mile long, high sand bar with heavy wrack line. Colony concentrated along high center. Many chicks less than 1 week old at the waterline. Deer and cyote tracks abundant. Two mature Bald Eagles observed also.

MO side

OBSERVERS: Jones, Rumancik, Carpenter, Lott, et al.

RIVER GAGE READING: Caruthersville = 13.1 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 10:00 RIVER MILE: 864.5

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

WHERE SITED: Latitude: 36.3241  
Longitude: 89.6107

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 60  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 5  
Chicks: No

**SUBSTRATE:**

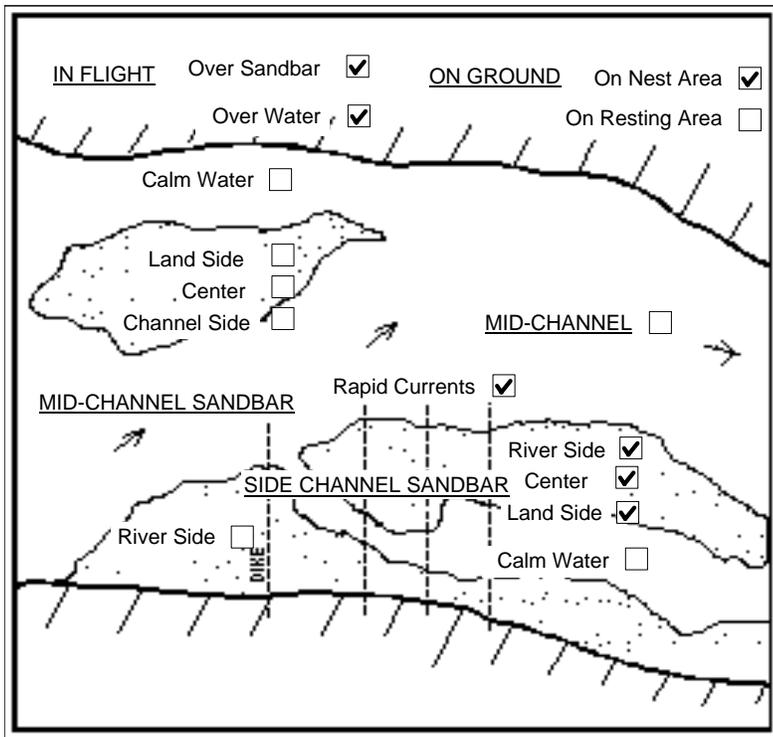
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 84 °F  
Rain: No  
Wind: S 3-5 mph  
% Cloud: 10



**OTHER NOTES:**

Left Bank. Attached, very large, broad, gently sloping bar of solid sand. Nests along ripple line drop-offs, very sparse and scattered. Many ATV tracks and camping debris. One Largemouth Bass fingerling.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 9:31 RIVER MILE: 860.5

LOCALITY: Pemiscott MO SITE NAME: Little Cypress Bend Revetment  
County/Parish State

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 4  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

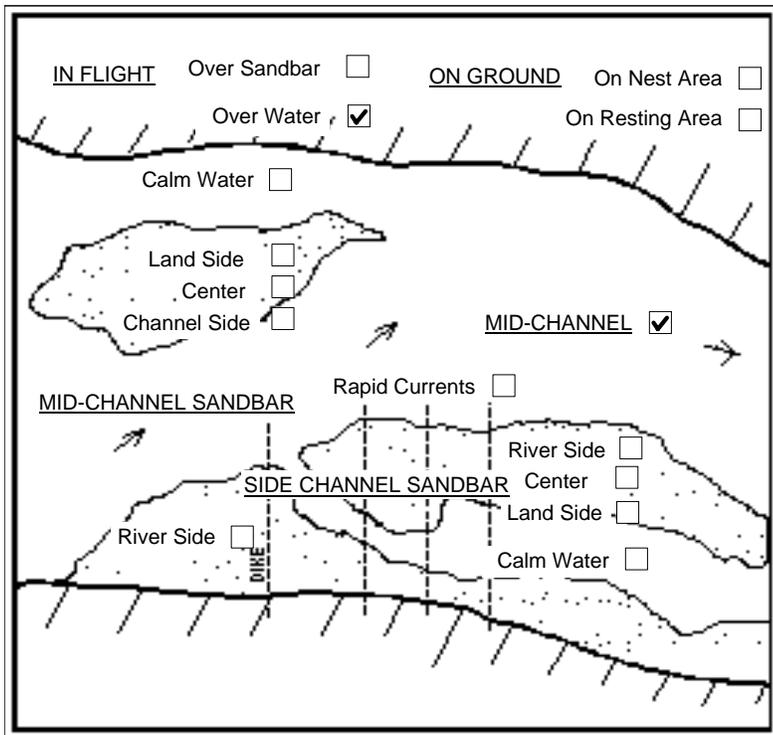
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 82 °F  
Rain: No  
Wind: calm  
% Cloud: 10



**OTHER NOTES:**

Four Terns fishing on revetment.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
MO side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 9:14 RIVER MILE: 857.2

LOCALITY: Pemiscott MO SITE NAME: Robinson Bayou Dikes  
County/Parish State

WHERE SITED: Latitude: 36.2461  
Longitude: 89.5781

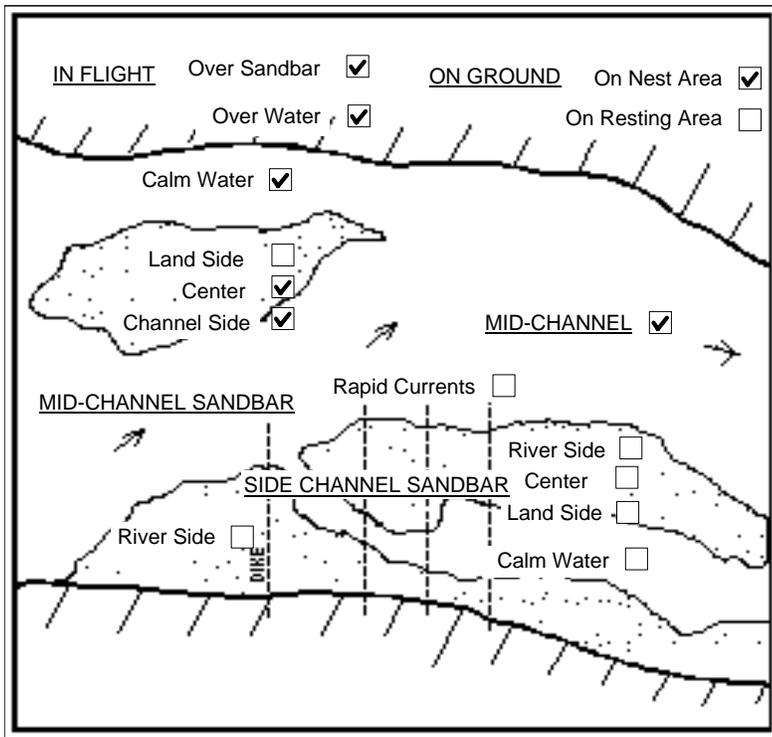
Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:  
Adults: 156  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 5  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Willows/Cottonwoods  
Distance: 500 Feet

FIELD CONDITION:  
Temperature: 82 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 10



OTHER NOTES:

Right Bank. Unattached, medium-size, undulating sand bar with colony about 1 mile in length. Nests with eggs and scrapes in patches of sand surrounded by gravel on higher points of bar, but widely dispersed. ATV and deer tracks indicate probably attached. Mussel shell collected. Purple Martins and White Pelicans sharing the habitat. Campers on downstream end 3 miles from colony.

MO side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 8:50 RIVER MILE: 853.0

LOCALITY: Pemiscott MO SITE NAME: Robinson Bayou Dikes  
County/Parish State

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

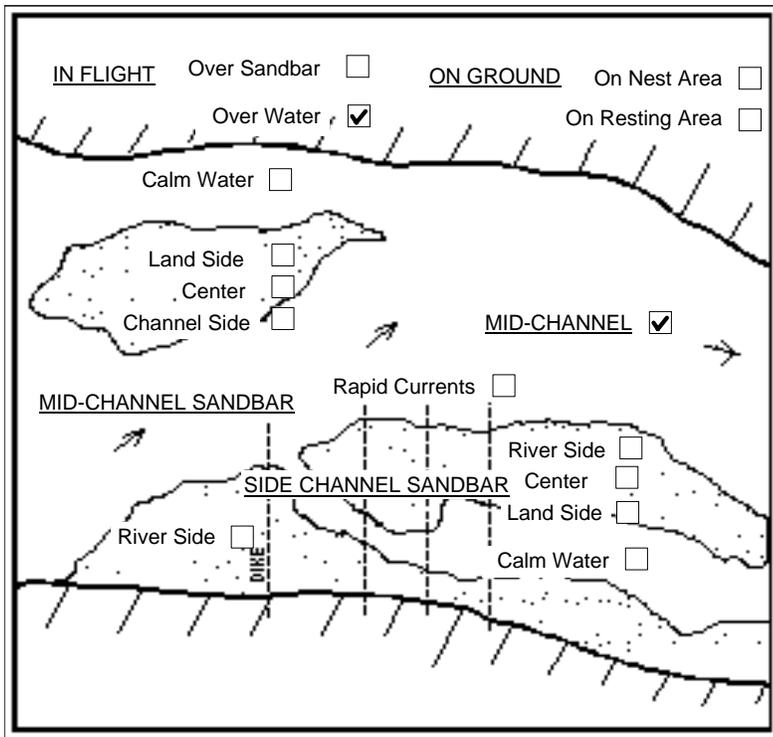
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 13  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: 0 Feet

FIELD CONDITION:  
Temperature: 82 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 10



OTHER NOTES:

Right Bank. Fifteen Terns, 2 in transit, 13 fishing along 5 mile stretch downstream of Robinson Bayou Dikes colony.

MO side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 11:14 RIVER MILE: 846.0

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

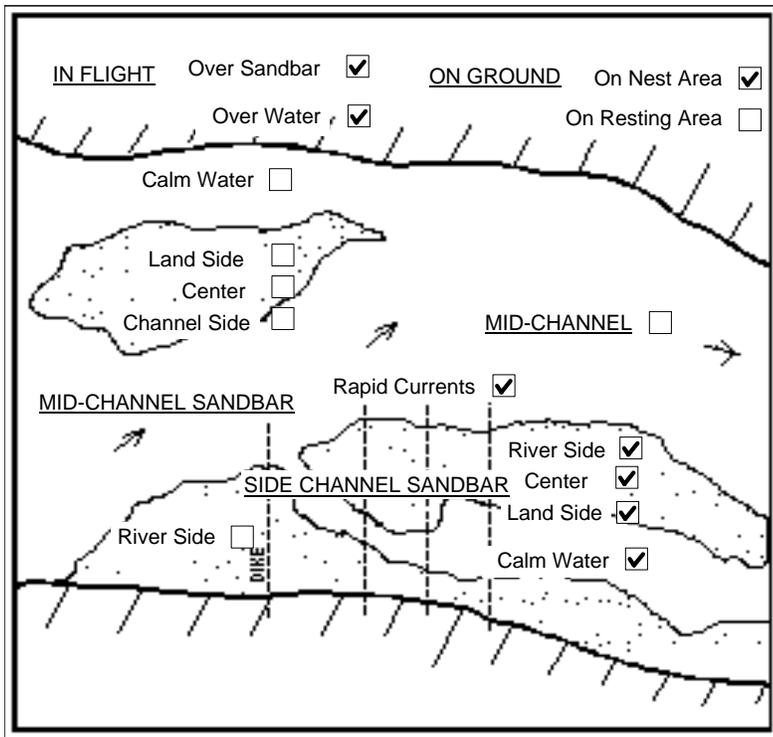
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 48  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Willows  
Distance: 500 Feet

FIELD CONDITION:  
Temperature: 90 °F  
Rain: No  
Wind: calm  
% Cloud: haze



OTHER NOTES:

Left Bank. Small sand bar upstream from Blaker Towhead between dikes with mud and light debris. No nests confirmed, but courtship and carrying fish observed. Most Terns resting at waterline. Great Blue Heron, geese and turtle tracks abundant.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 11:52 RIVER MILE: 836.0

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

WHERE SITED: Latitude: 36.0908  
Longitude: 89.6683

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 270  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 15  
Chicks: Yes

SUBSTRATE:

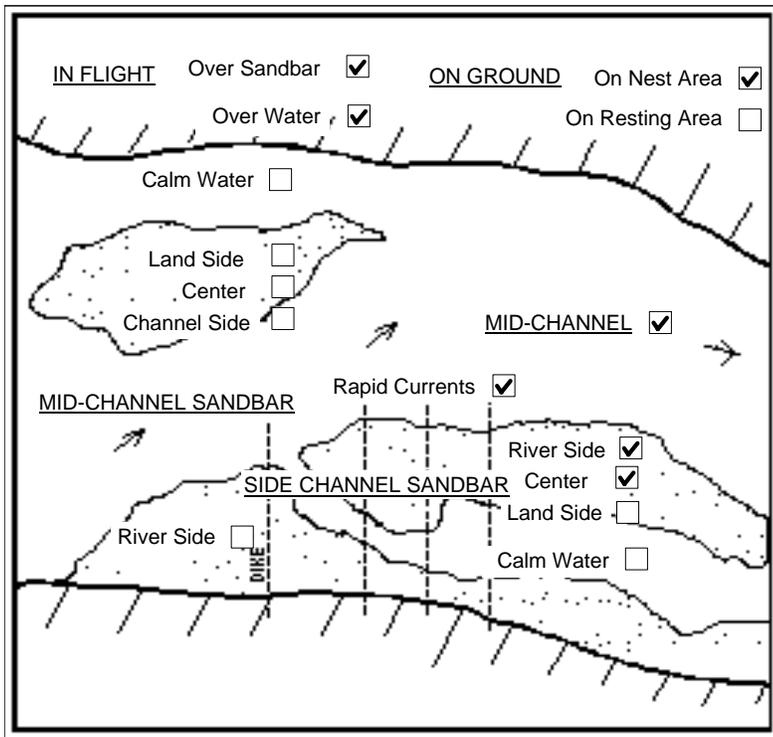
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 90 °F  
Rain: No  
Wind: calm  
% Cloud: 30 haze



OTHER NOTES:

Left Bank. Unattached, medium size, high, solid sand bar with large, widely dispersed colony (1.5 x .25 miles) Chicks up to 10 days old. Breasting behavior observed, but no tracks or other disturbance factors.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 12:30 RIVER MILE: 830.5

LOCALITY: Pemiscott MO SITE NAME: Island #20 Dikes Upper  
County/Parish State

WHERE SITED: Latitude: 36.0387  
Longitude: 89.6932

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 7  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

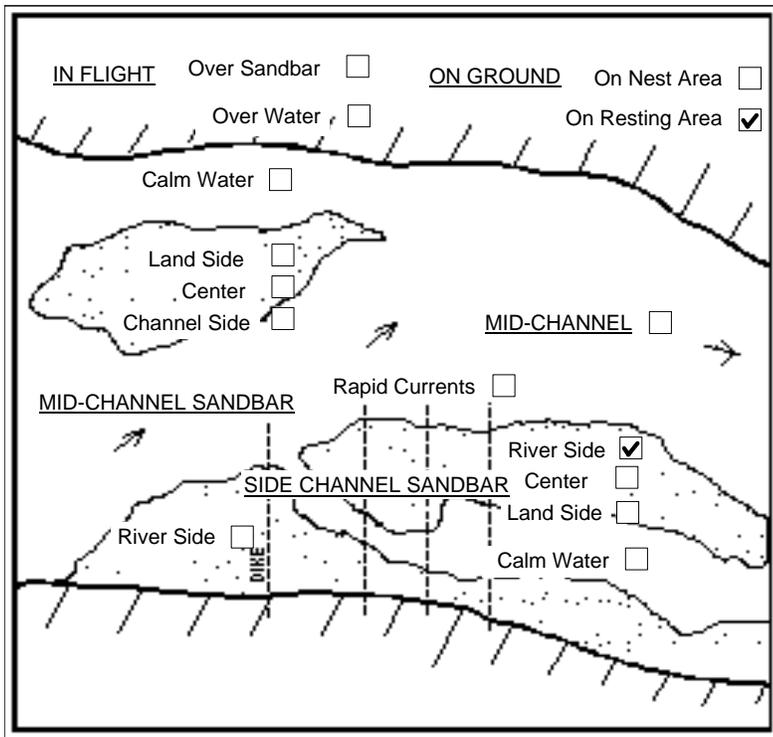
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 400 Feet

**FIELD CONDITION:**

Temperature: 90 °F  
Rain: No  
Wind: calm  
% Cloud: 30 haze



**OTHER NOTES:**

Right Bank. Resting bar only, no reproductive behavior observed.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
MO side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 12:36 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: 4  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

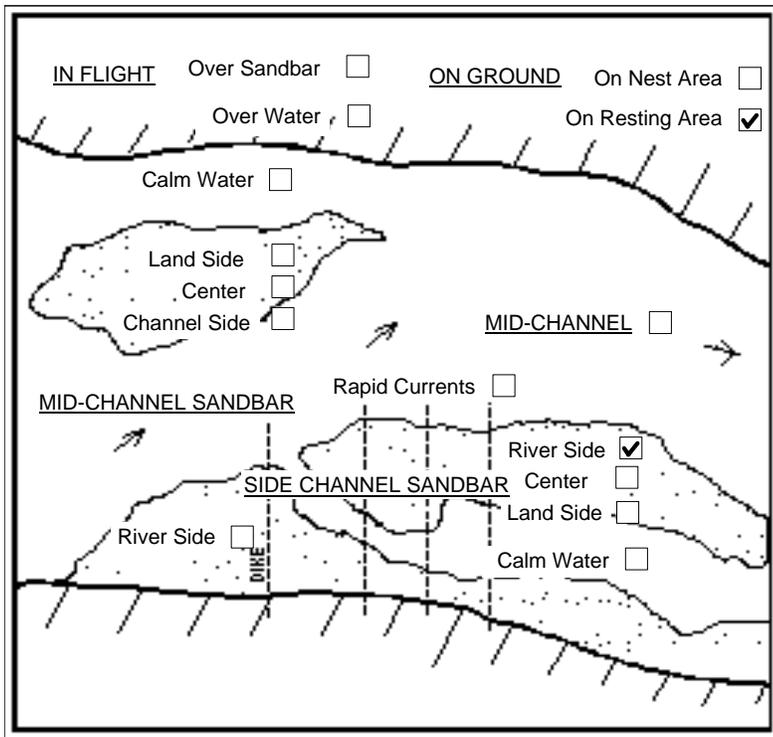
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 90 °F  
Rain: No  
Wind: SW 5 mph  
% Cloud: 30 haze



**OTHER NOTES:**

Four terns resting at waterline. Bald Eagle observed in flight above wooded portion of Island #21.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 13:07 RIVER MILE: 825.5

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

WHERE SITED: Latitude: 35.9624  
Longitude: 89.7101

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 102  
Juveniles: \_\_\_\_\_  
Eggs: 1,2  
Nests: 10  
Chicks: No

SUBSTRATE:

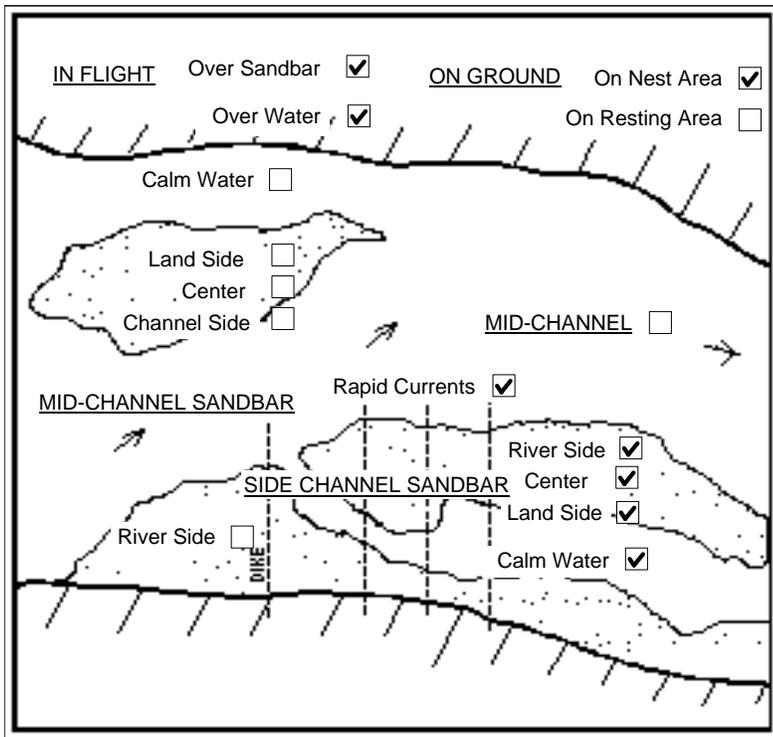
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows/Grass  
Distance: 200 Feet

FIELD CONDITION:

Temperature: 90 °F  
Rain: No  
Wind: SW 5 mph  
% Cloud: 50



OTHER NOTES:

Left Bank. High, barely attached, steep, narrow, point bar. Colony concentrated on highest pt., but also utilizing lower more recently exposed sand. Human and coyote tracks abundant with predation leaving many egg shell fragments. Thirty five Kildeer.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 11:10 RIVER MILE: 819.5

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

WHERE SITED: Latitude: 35.9086  
Longitude: 89.6470

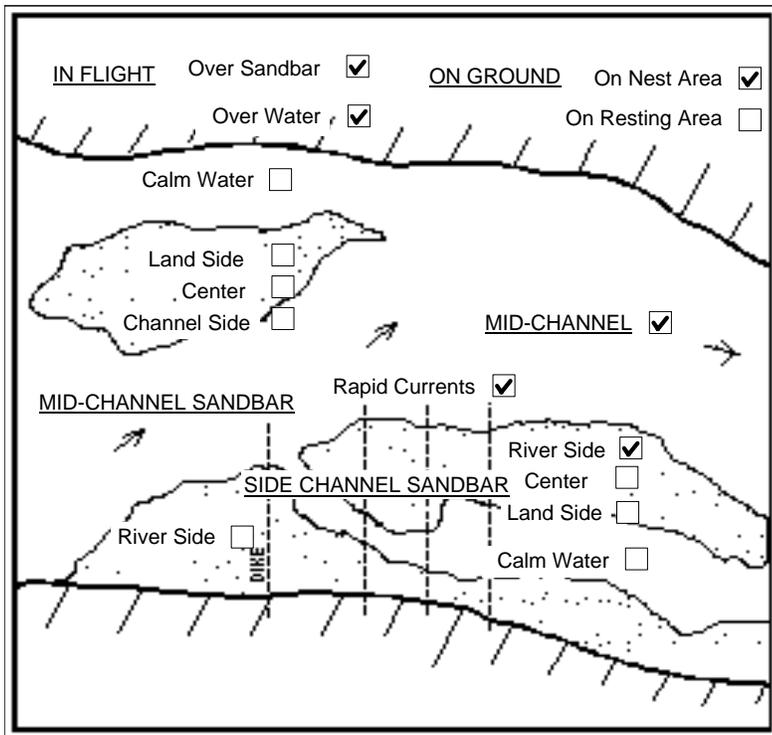
Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:  
Adults: 22  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: Yes

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 88 °F  
Rain: No  
Wind: SE 5 mph  
% Cloud: < 10



**OTHER NOTES:**

Right Bank. Large, high, flat, attached to large island, bar with gravel patches. Chicks observed 1-2 days old. Mobbing and breasting behavior river side. Most adults at the waterline. Coyote and turtle tracks, but no recent signs of predation. Overnight campers downstream 1 mile at the waterline. This reach of river was bypassed one week earlier due to lightning, hence the reason for the discrepancy in survey date sequence.  
AR side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 11:40 RIVER MILE: 815.0

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: 0 Feet

**NUMBERS SIGHTED:**

Adults: 10  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

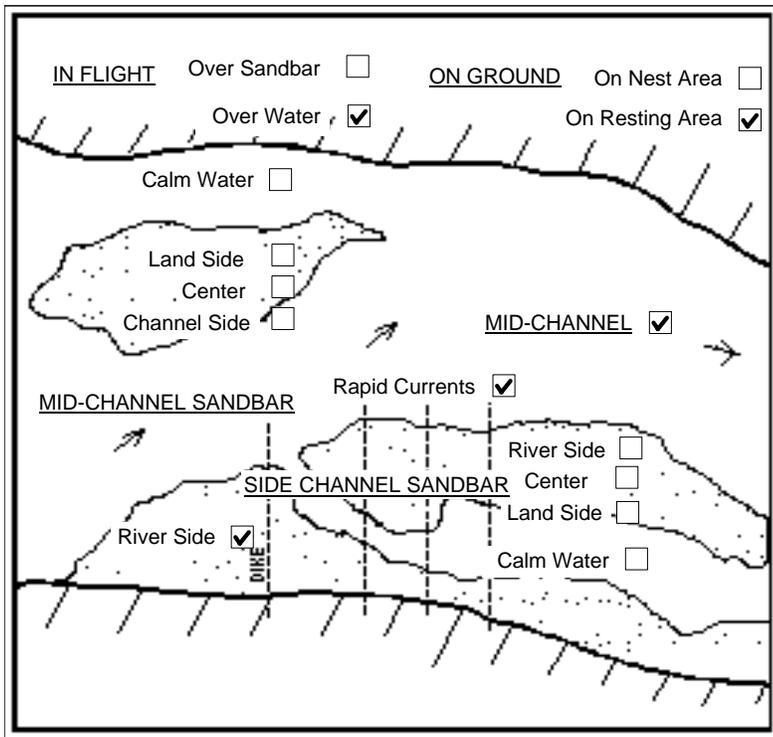
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 88 °F  
Rain: No  
Wind: SE 5 mph  
% Cloud: 10



**OTHER NOTES:**

Right Bank. Very low, recently emerged wet sand bars below lower dike in back chute. Five Terns resting at waterline, 5 more flying and feeding among outer dikes.

AR side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 12:17 RIVER MILE: 811.5

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

WHERE SITED: Latitude: 35.9077  
Longitude: 89.7404

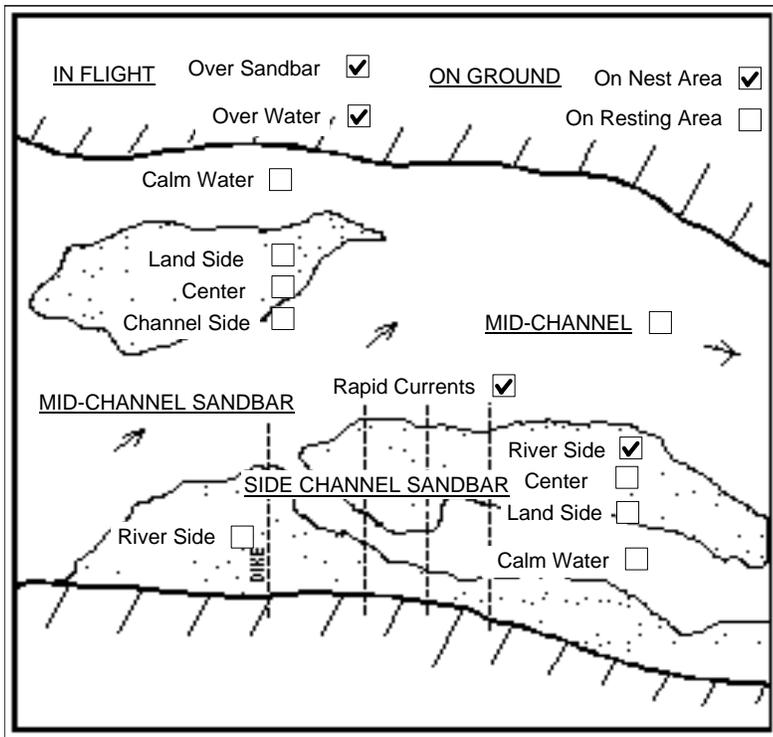
Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:  
Adults: 29  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 8  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 88 °F  
Rain: No  
Wind: SE 5 mph  
% Cloud: 20



OTHER NOTES:

Left Bank. High, attached sand bar with colony about 1.5 mile long by 0.5 mile wide with nests widely dispersed. Coyote tracks within colony, but no recent signs of predation. Jug fishing from boat 1/2 mile offshore. No human tracks. Two mussel shells collected.

TN side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 12:39 RIVER MILE: 810.0

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

WHERE SITED: Latitude: 35.8973  
Longitude: 89.7557

Approximate Distance to Water: 250 Feet

NUMBERS SIGHTED:

Adults: 19  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 1  
Chicks: No

SUBSTRATE:

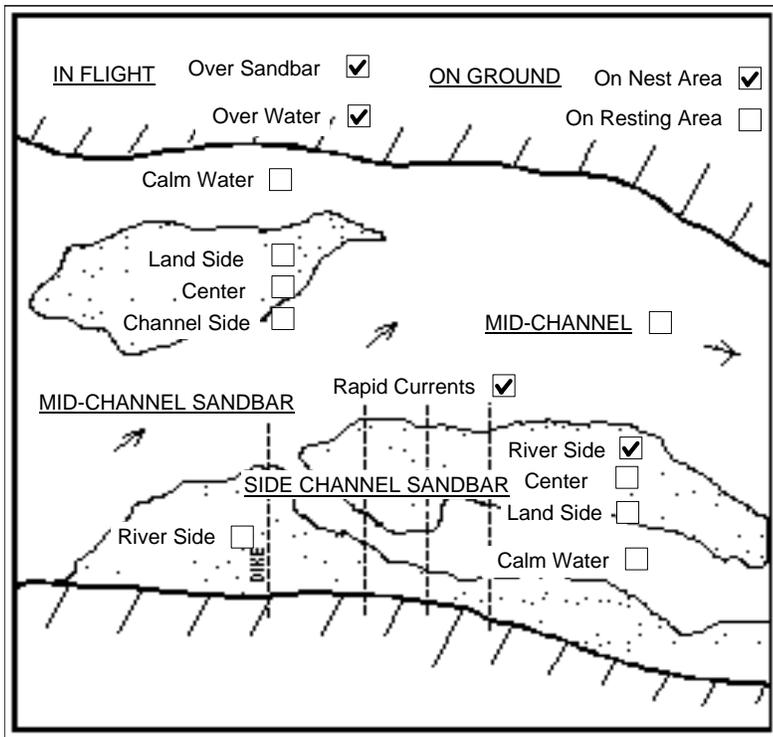
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 89 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 20



OTHER NOTES:

Left Bank. Medium size sand bar with some mud, most likely attached at this river stage. Most birds observed resting at riverside waterline, but one observed setting on nest. Terns breasting and fishing on river side currents. No tracks observed. Two paddlers from Minneapolis Minnesota in canoe opposite bank.

TN side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 12:42 RIVER MILE: 807.7

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

WHERE SITED: Latitude: 35.8719  
Longitude: 89.7663

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 21  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 1  
Chicks: No

SUBSTRATE:

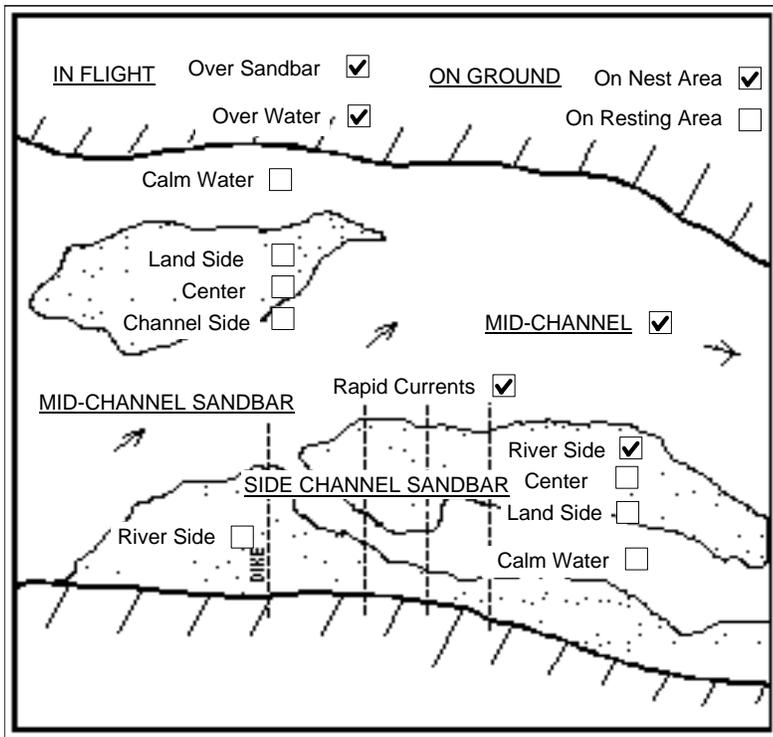
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: grass, forbs  
Distance: 100 Feet

FIELD CONDITION:

Temperature: 90 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 30



OTHER NOTES:

Left Bank. Low, flat, clean sand bar between dikes with one Tern setting inland, the rest observed at the waterline. Coyote tracks abundant.

TN side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 13:00 RIVER MILE: 806.8

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

WHERE SITED: Latitude: 35.8553  
Longitude: 89.7492

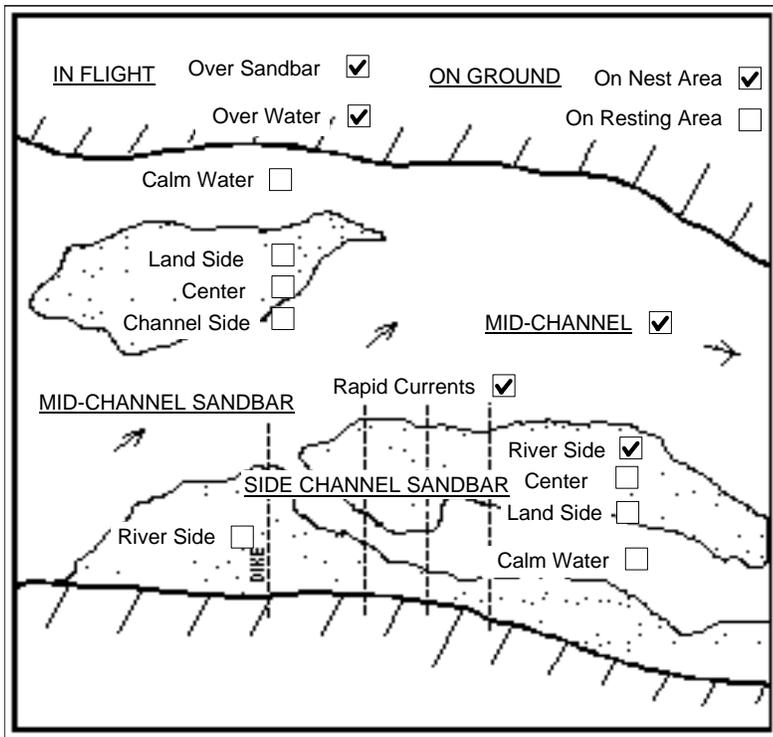
Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:  
Adults: 12  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 1  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Grasses/Forbs  
Distance: 60 Feet

FIELD CONDITION:  
Temperature: 90 °F  
Rain: No  
Wind: E 10-15 mph  
% Cloud: 30



OTHER NOTES:

Left Bank. Unattached, long, narrow, flat-topped sand bar with several wrack lines. Mobbing and other reproductive behavior observed. Coyote tracks along waterline and wrack lines. Last year's count yielded 649 adults at this site, with hundreds of chicks and nests.

TN side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/9/2005 TIME OF DAY: 13:51 RIVER MILE: 804.0

LOCALITY: Lauderdale TN SITE NAME: Island #25 Dikes  
County/Parish State

WHERE SITED: Latitude: 35.8350  
Longitude: 89.7065

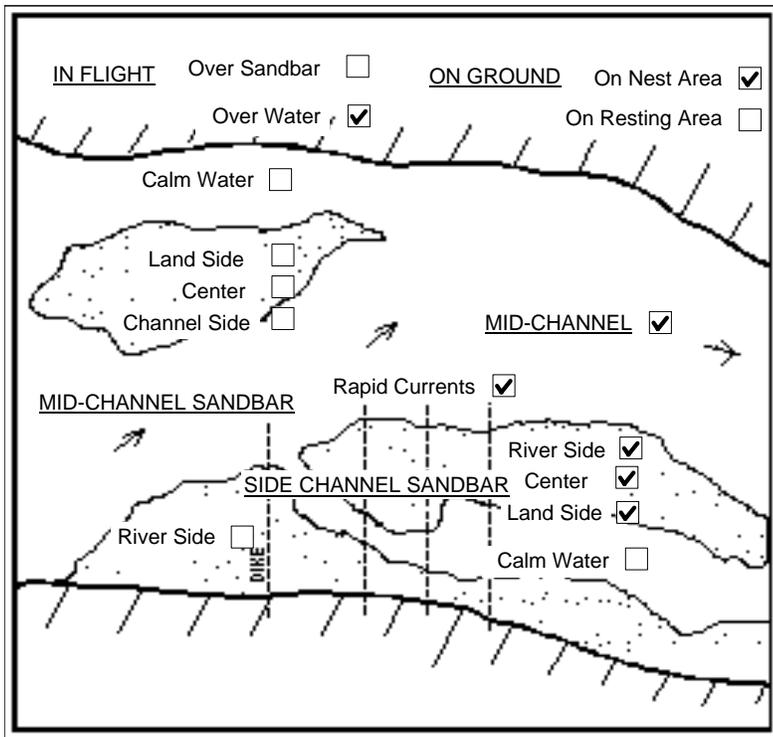
Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:  
Adults: 36  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 90 °F  
Rain: No  
Wind: E 10-15 mph  
% Cloud: 30



OTHER NOTES:

Right Bank. Unattached, barely emergent, sand bar between dikes. This colony may be translocated from another colony located in the earlier survey 2 miles downstream, especially since the number of adults observed was so close (35 vs. 36). Upon revisiting the downstream colony, no significant colony could be confirmed, suggesting movement had occurred.

TN side

OBSERVERS: Jones, Jones, Rumancik, Thron, Ford, et al.

RIVER GAGE READING: Caruthersville = 10.3 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 14:38 RIVER MILE: 802.5

LOCALITY: Mississippi AR SITE NAME: Bend of Island #25  
County/Parish State

WHERE SITED: Latitude: 35.8171  
Longitude: 89.7045

Approximate Distance to Water: 150 Feet

**NUMBERS SIGHTED:**

Adults: 35  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 7  
Chicks: Yes

**SUBSTRATE:**

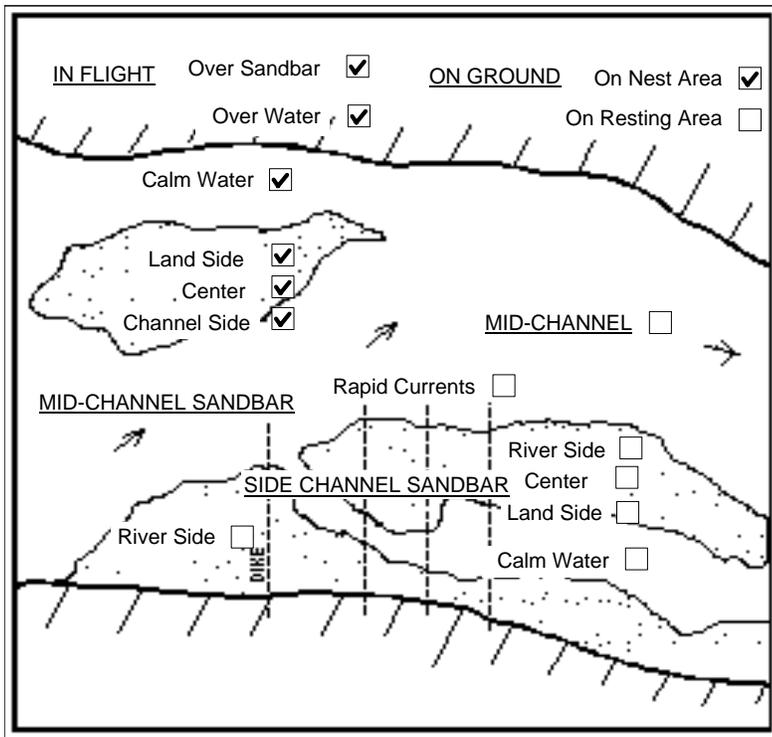
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: 0 Feet

**FIELD CONDITION:**

Temperature: 75 °F  
Rain: Yes  
Wind: SW 10-15 mph  
% Cloud: 90



**OTHER NOTES:**

Right Bank. Small, low, flat, unattached mid-channel bar with 1-2 day old chicks and most nests with 3 eggs. No tracks or disturbance. Thunderstorms with heavy lightning subsiding.

AR side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Caruthersville = 12.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 15:55 RIVER MILE: 771.0

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

WHERE SITED: Latitude: 35.5283  
Longitude: 89.8987

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 52  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 1  
Chicks: No

SUBSTRATE:

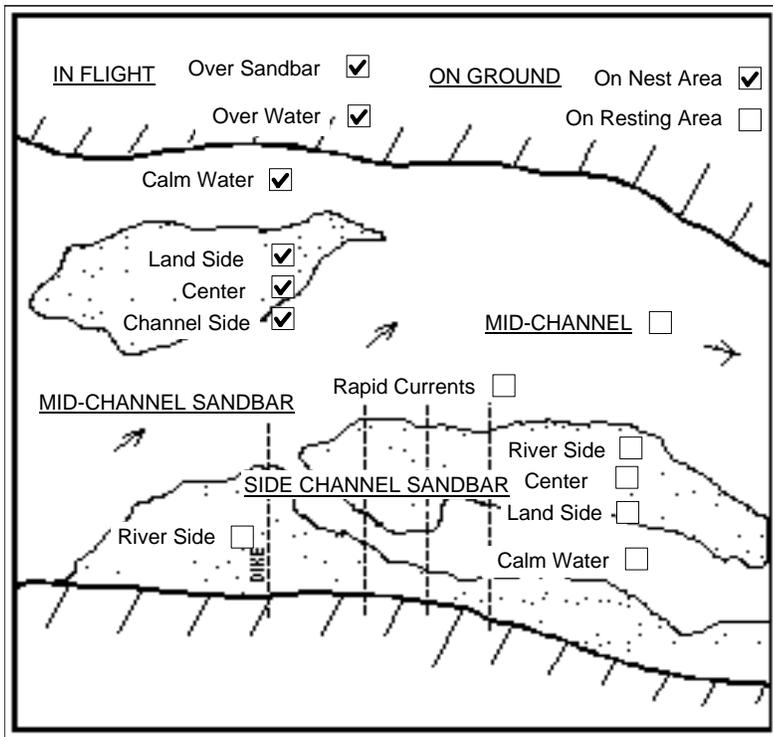
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 50 Feet

FIELD CONDITION:

Temperature: 79 °F  
Rain: No  
Wind: S 10 mph  
% Cloud: 90



OTHER NOTES:

Left Bank. Very high, unattached, mid-channel bar partially composed of dredging spoil over past few years. Heavy mobbing of observers with human and pet tracks abundant with broken Tern eggs. Heavy recreational use with 21 humans at the waterline in boats and jet skis.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Memphis = 5.4 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/26/2006 TIME OF DAY: 16:20 RIVER MILE: 766.5

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 16  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

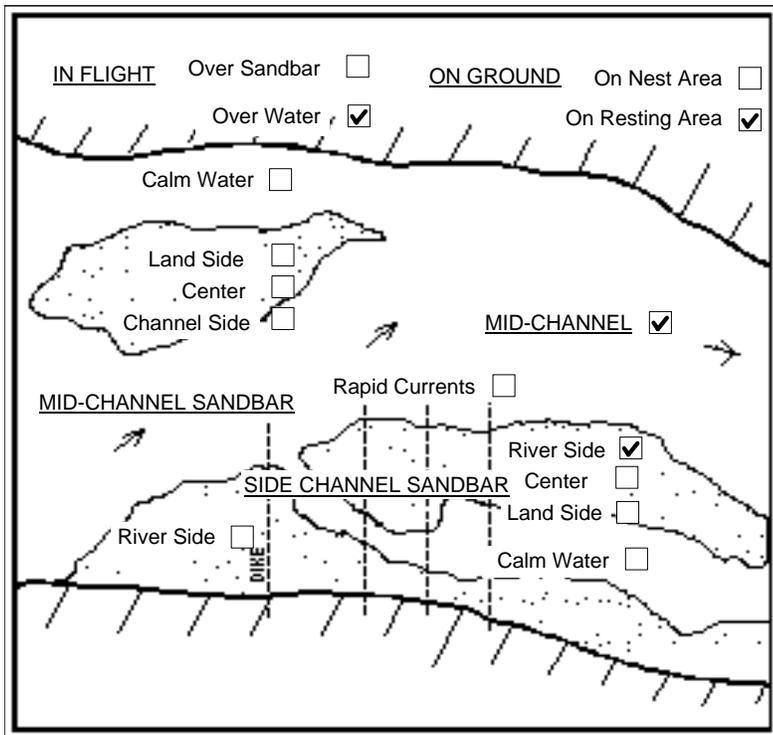
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 81 °F  
Rain: No  
Wind: S 10 mph  
% Cloud: 90



**OTHER NOTES:**

Left Bank. Very low, attached sand bar at second dike with 14 resting at waterline, 2 more feeding in mid-channel 2 miles downstream.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Memphis = 5.4 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/26/2005 TIME OF DAY: 16:40 RIVER MILE: 760.0

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

WHERE SITED: Latitude: 35.4416  
Longitude: 90.0064

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 7  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

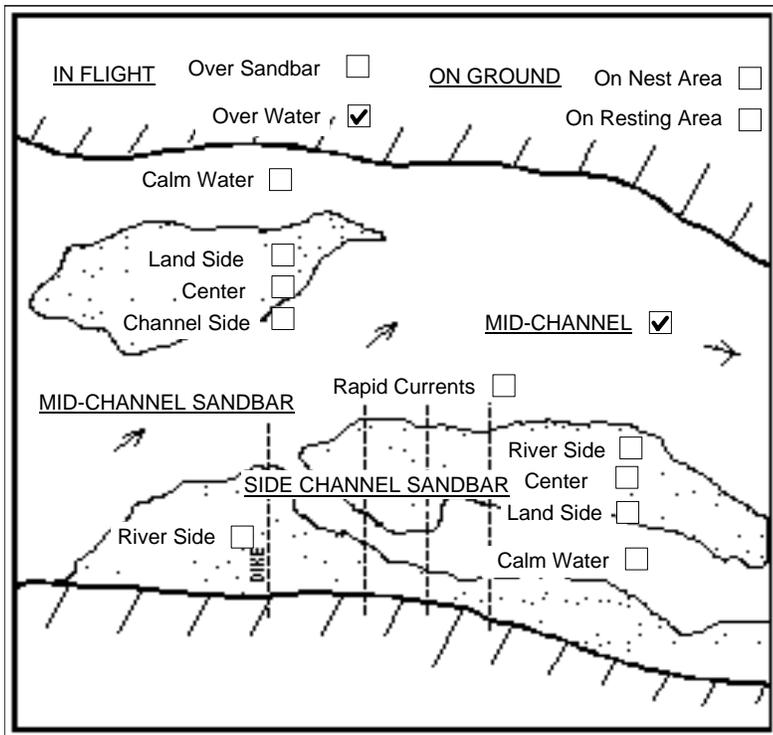
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: 0 Feet

**FIELD CONDITION:**

Temperature: 81 °F  
Rain: No  
Wind: S 10 mph  
% Cloud: 90



**OTHER NOTES:**

Seven flying in transit mid channel.

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Memphis = 5.4 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 17:09 RIVER MILE: 755.0

LOCALITY: Shelby TN SITE NAME: Densford Bar  
County/Parish State

WHERE SITED: Latitude: 35.3902  
Longitude: 90.0703

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 230  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 16  
Chicks: Yes

SUBSTRATE:

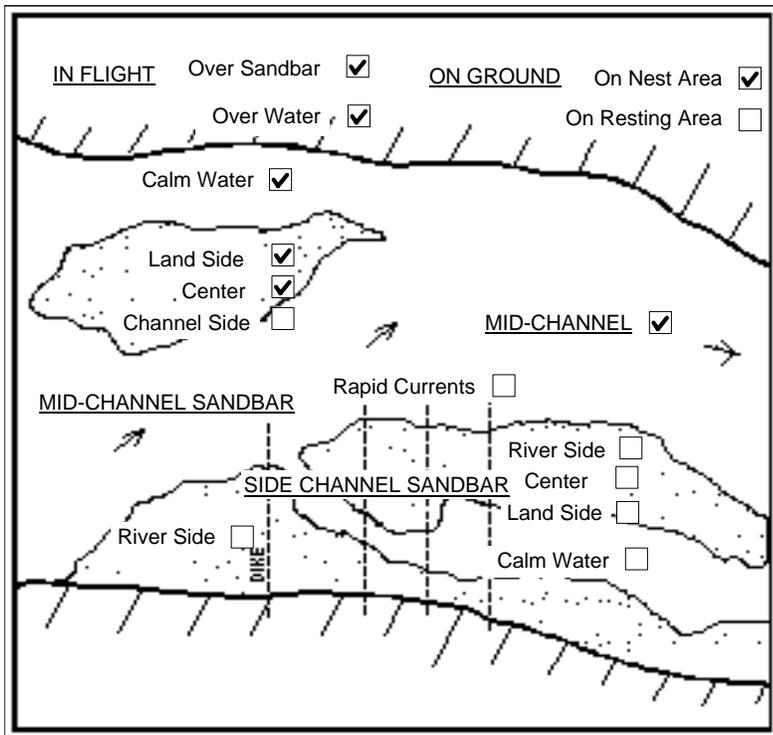
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows/Cottonwoods  
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 81 °F  
Rain: No  
Wind: S 10 mph  
% Cloud: 90



OTHER NOTES:

Right Bank. Long, high, flat bar with wrack lines. Last years (2004) census counted only 3 terns and no nesting activity. Mobbing intense with lots of courtship behavior. Chicks from 2 to 7 days old. Human and dog tracks abundant as usual, with signs of camping and recreational use at the waterline.

TN side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Memphis = 5.4 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/26/2005 TIME OF DAY: 18:08 RIVER MILE: 740.5

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

WHERE SITED: Latitude: 35.2074  
Longitude: 90.0730

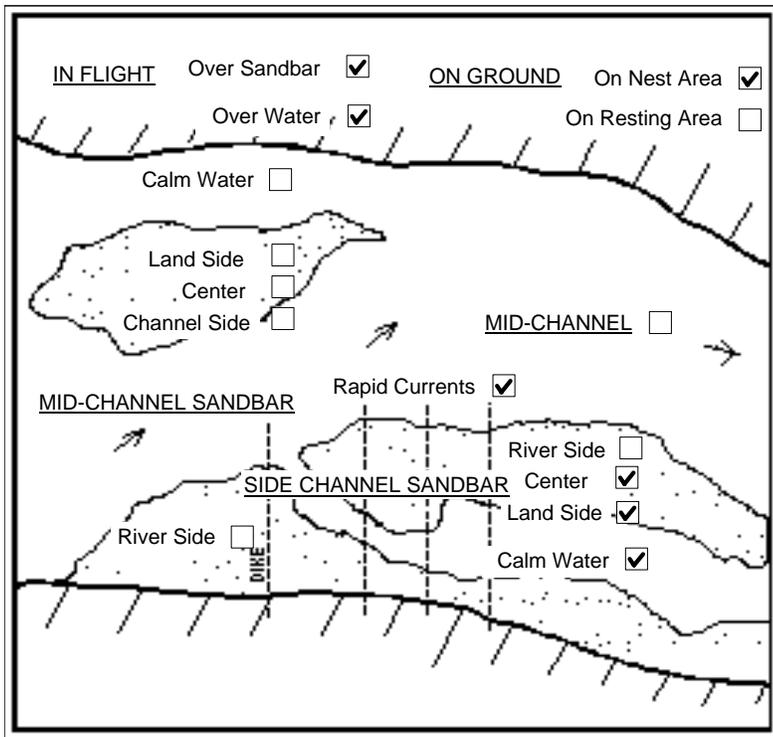
Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:  
Adults: 92  
Juveniles: \_\_\_\_\_  
Eggs: 1,3  
Nests: 3  
Chicks: Yes

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Hardwoods  
Distance: 1000 Feet

FIELD CONDITION:  
Temperature: 82 °F  
Rain: No  
Wind: S 5-10 mph  
% Cloud: 90



**OTHER NOTES:**

Right Bank. Medium size gravel bar with some sand and mud within dike field. Attached and undulating with scattered coal chunks. Intense mobbing and feeding in back chute. Chicks 2 to 5 days old. No tracks.

AR side

OBSERVERS: Jones, Rumancik, Lott, Davin, Campen, Thomas

RIVER GAGE READING: Memphis = 5.4 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 9:38 RIVER MILE: 733.0

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

WHERE SITED: Latitude: 35.1236  
Longitude: 90.1031

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 117  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 4  
Chicks: Yes

SUBSTRATE:

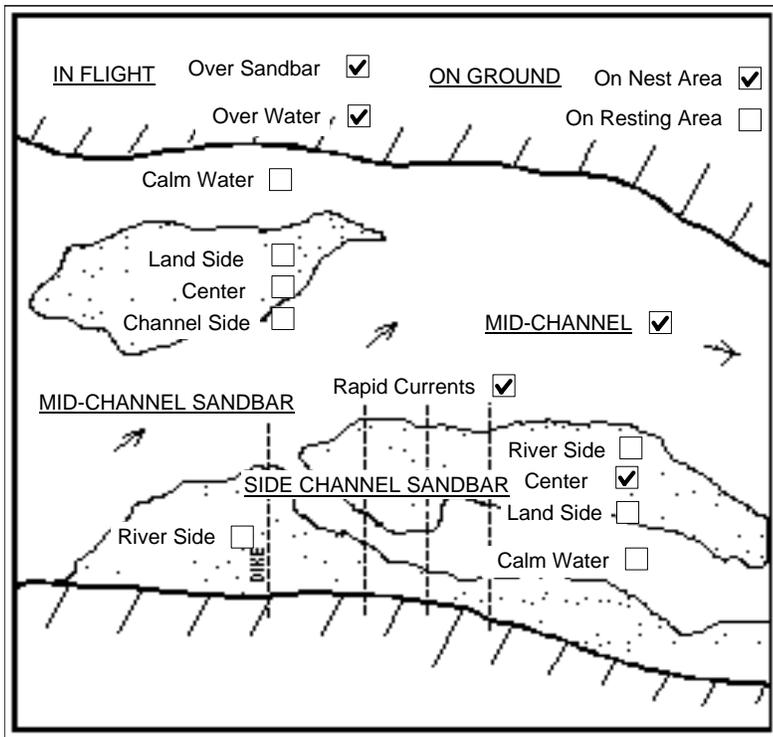
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 800 Feet

FIELD CONDITION:

Temperature: 80 °F  
Rain: No  
Wind: calm  
% Cloud: 10



OTHER NOTES:

Right Bank. High, flat, medium size sand bar with small wrack line and nests toward high center. Chicks up to 1 week old. Two fishing opposite bank. ATV and coyote tracks indicates attached at present river stage. One Killdeer and many Purple Martins.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 10:04 RIVER MILE: 729.0

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

WHERE SITED: Latitude: 35.1161  
Longitude: 90.1714

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 62  
Juveniles: \_\_\_\_\_  
Eggs: 1,3  
Nests: 5  
Chicks: No

SUBSTRATE:

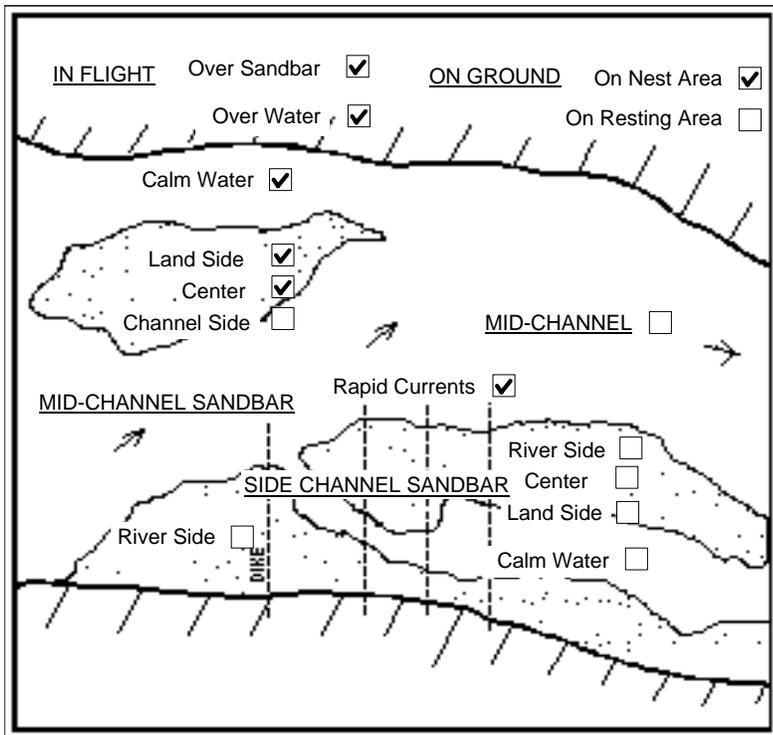
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 81 °F  
Rain: No  
Wind: calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Unattached medium high, point sand bar. Colony about 1 mile long with some courtship behavior, but just a few scrapes with eggs and light mobbing. Coyote and deer tracks. Mussel shell. Threadfin Shad fingerling.

TN side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 10:30 RIVER MILE: 725.0

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

WHERE SITED: Latitude: 35.0650  
Longitude: 90.1942

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 14  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

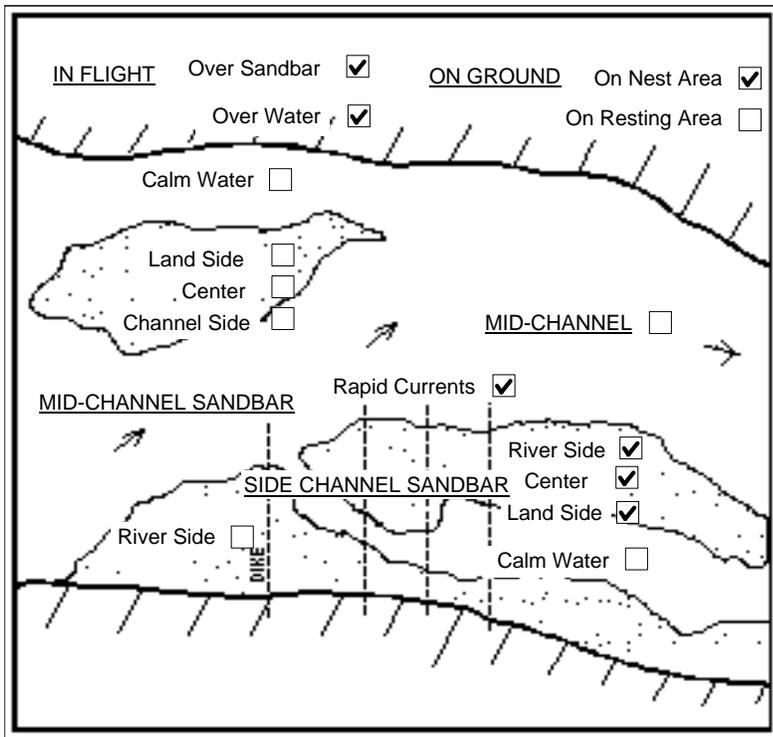
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 82 °F  
Rain: No  
Wind: calm  
% Cloud: 30



**OTHER NOTES:**

Right Bank. Medium high, 1/2 mile long sand, mud and gravel bar. Three setting inland on probable nests, though no eggs or chicks were observed. Courting and light mobbing. Coyote tracks and mussel shell collected.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 11:00 RIVER MILE: 717.0

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

WHERE SITED: Latitude: 35.0117  
Longitude: 90.2925

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 300  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 16  
Chicks: Yes

SUBSTRATE:

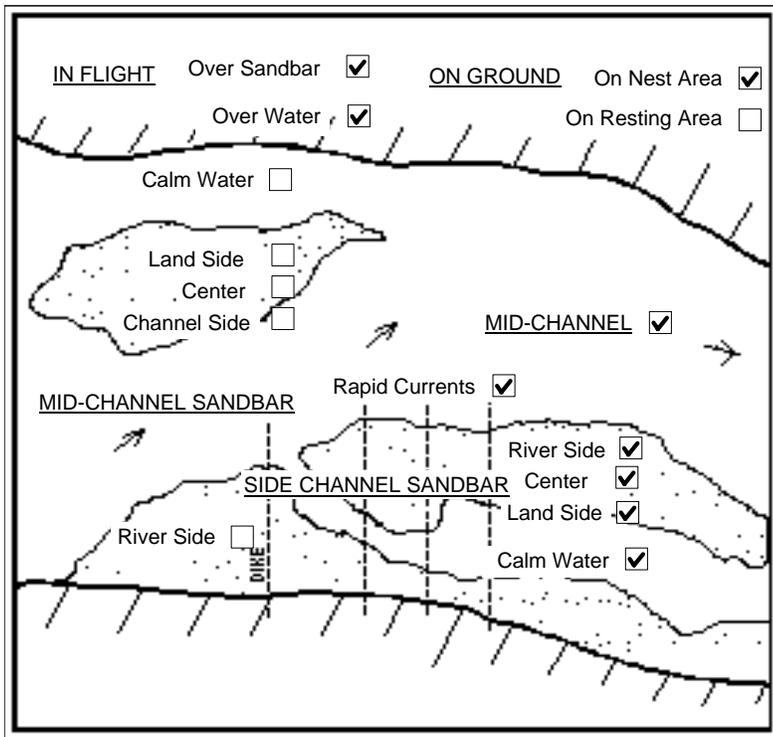
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 81 °F  
Rain: No  
Wind: calm  
% Cloud: 40



OTHER NOTES:

Left Bank. Unattached, 1.5 mile long sand bar with colony dispersed along entire length. Terns breasting and feeding on all sides, intense mobbing within colony. Chicks 1,2,3 days old and camping remnants at waterline. One Great Blue Heron and turtle tracks abundant.

MS side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 11:30 RIVER MILE: 707.0

LOCALITY: Crittenden AR SITE NAME: Cat Island  
County/Parish State

WHERE SITED: Latitude: 34.9051  
Longitude: 90.2582

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 1  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

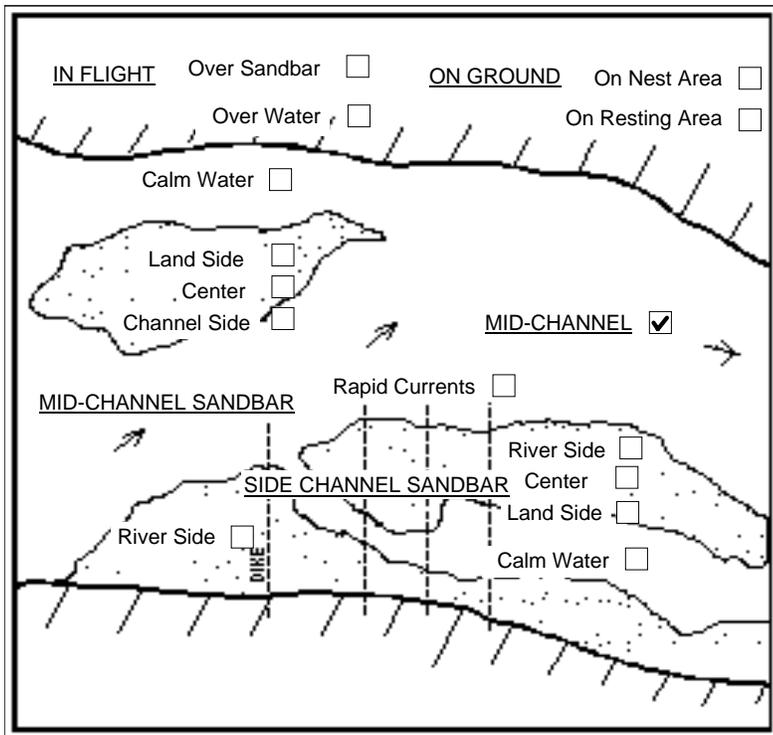
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 81 °F  
Rain: No  
Wind: calm  
% Cloud: 40



**OTHER NOTES:**

One in transit mid-channel.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 11:38 RIVER MILE: 705.0

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

WHERE SITED: Latitude: 34.8969  
Longitude: 90.2603

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 72  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 3  
Chicks: No

SUBSTRATE:

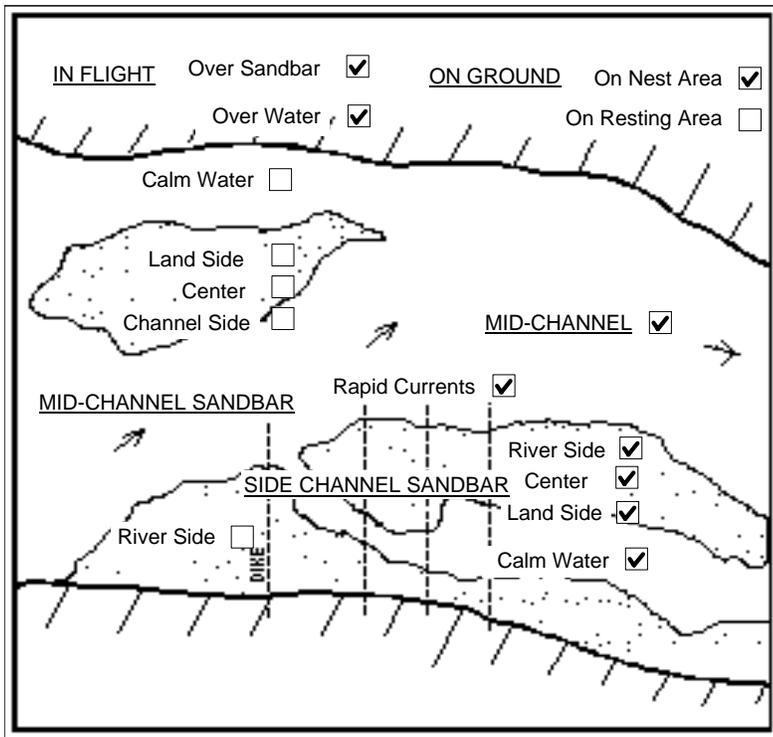
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 82 °F  
Rain: No  
Wind: calm  
% Cloud: 40



OTHER NOTES:

Right Bank. Downstream sand spit attached to Cat Island, and other small, low, flat sand bars between Seypell Dikes. Most birds resting at waterline, with 3 observed setting on centers of bars. Courting and fishing both sides. No tracks or disturbance.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 11:53 RIVER MILE: 703.5

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

WHERE SITED: Latitude: 34.8761  
Longitude: 90.3078

Approximate Distance to Water: 60 Feet

**NUMBERS SIGHTED:**

Adults: 115  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 4  
Chicks: Yes

**SUBSTRATE:**

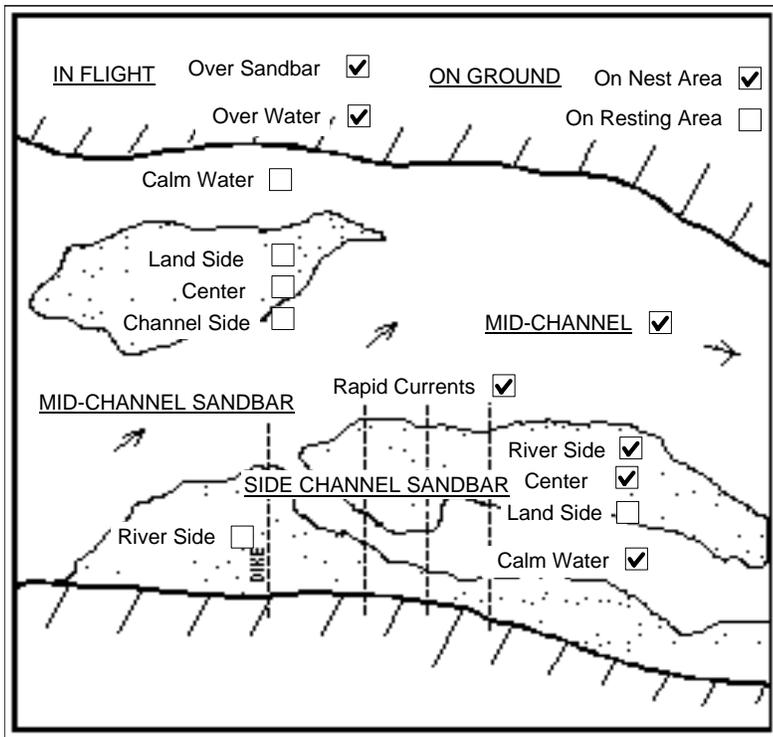
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 1000 Feet

**FIELD CONDITION:**

Temperature: 83 °F  
Rain: No  
Wind: calm  
% Cloud: 40



**OTHER NOTES:**

Left Bank. Unattached, medium size sand bar with courting, breasting on channel side. Many chicks 1-7 days old. No tracks or other disturbance observed.

MS side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 12:51 RIVER MILE: 701.0

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

WHERE SITED: Latitude: 34.8583  
Longitude: 90.3492

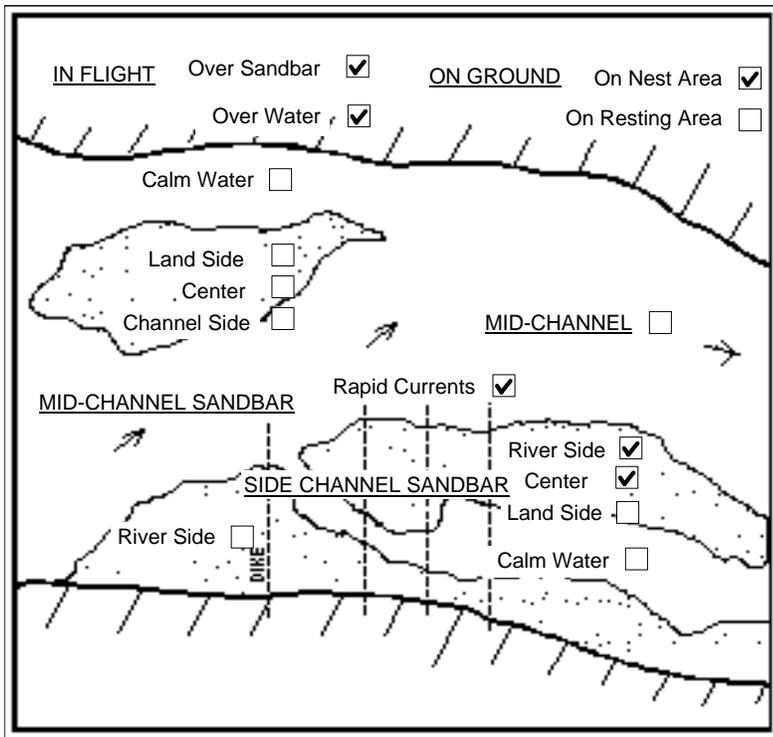
Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:  
Adults: 82  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 7  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Grasses  
Distance: 30 Feet

FIELD CONDITION:  
Temperature: 85 °F  
Rain: No  
Wind: calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Medium size sand bar below last dike. Many Terns resting at waterline, breasting and feeding on channel side. Colony about 1/4 mile long. Two eggs collected for DNA analysis and mussel shells. Coyote tracks meandering scrape to scrape, mobbing intense. One Great Blue Heron and 24 Canada Geese.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 13:28 RIVER MILE: 700.0

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

WHERE SITED: Latitude: 34.8406  
Longitude: 90.3761

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 25  
Juveniles: \_\_\_\_\_  
Eggs: 3,4  
Nests: 2  
Chicks: Yes

SUBSTRATE:

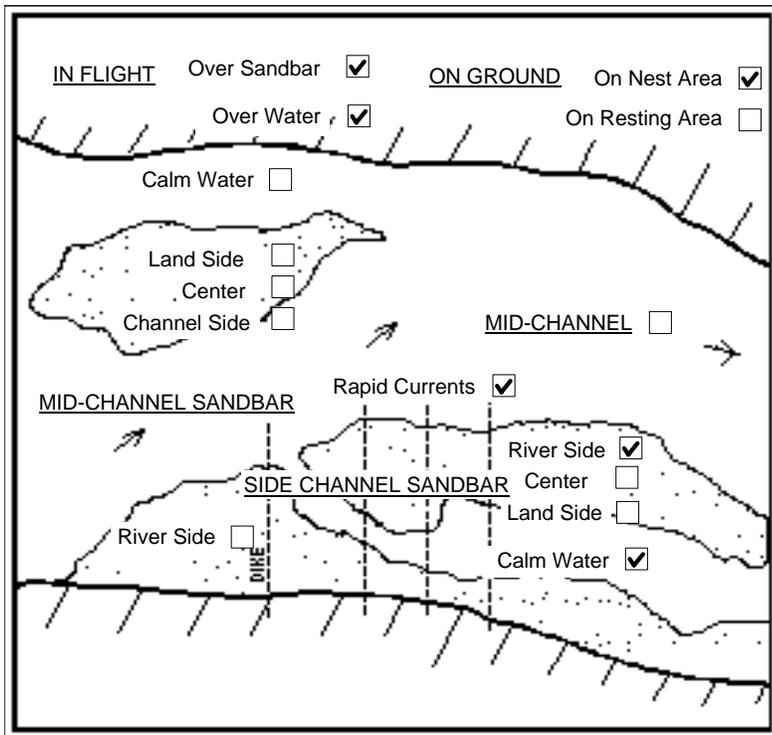
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Cottonwoods/grass  
Distance: 100 Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: calm  
% Cloud: 10



OTHER NOTES:

Right Bank. Huge, gently sloping, unattached sand bar directly across from Tunica river park. Colony in pure sand approximately 1/2 mile long by 1/4 mile wide. Chicks (up to 1 week old). One nest observed with 4 eggs (longer, darker, more pointed ?) but possibly Killdeer. Nests on high downstream point and lower mud flats. Mobbing intense, many fresh scrapes, but no tracks or signs of disturbance.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Memphis = 4.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 13:58 RIVER MILE: 694.0

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

WHERE SITED: Latitude: 34.8150  
Longitude: 90.4564

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 106  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 2  
Chicks: Yes

SUBSTRATE:

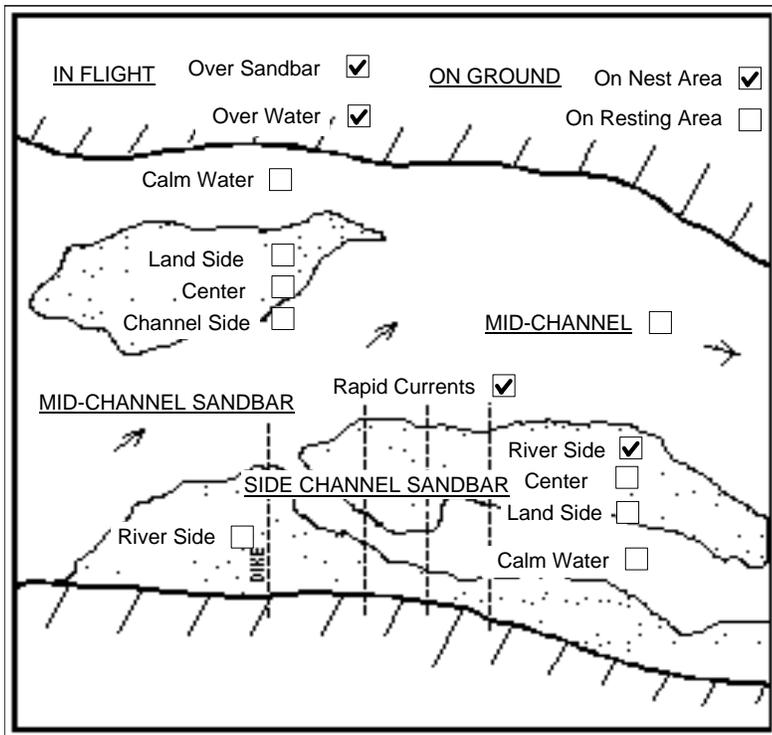
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 87 °F  
Rain: No  
Wind: clam  
% Cloud: 10



OTHER NOTES:

Left Bank. Large, attached 2.5 mile long by 1 mile wide sand bar, gently undulating with patches of pea gravel. Most Terns resting at waterline. Chicks 3-4 days old. Mobbing. Most birds counted along the waterline. ATV tracks present, 2 Mallards opposite bank.

MS side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 14:30 RIVER MILE: 686.0

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

WHERE SITED: Latitude: 34.7304  
Longitude: 90.4664

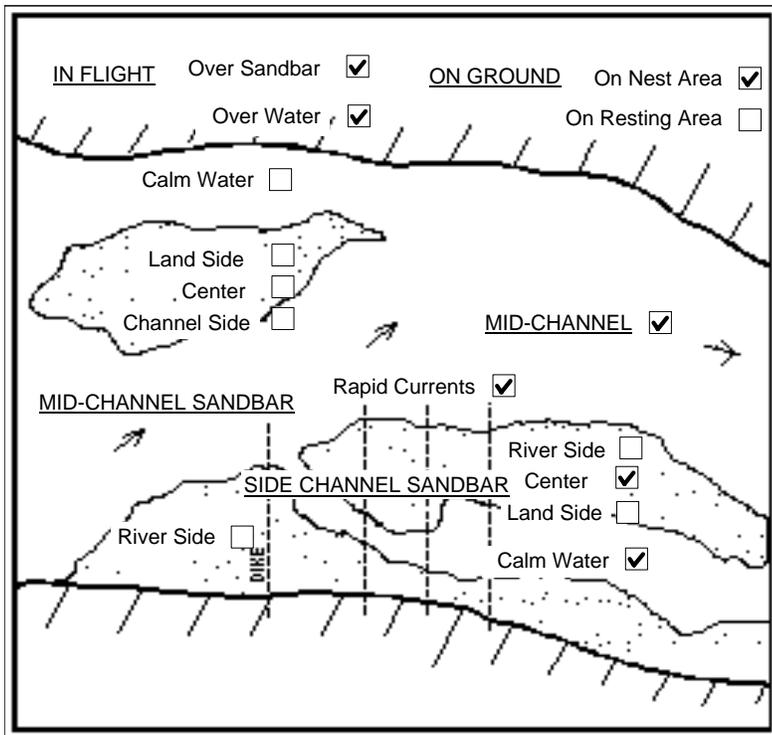
Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:  
Adults: 105  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 1  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 87 °F  
Rain: No  
Wind: calm  
% Cloud: 10



OTHER NOTES:

Right Bank. Another very large (3 miles) attached, sand and gravel bar with large stand of willows at center. Drift count with colony dispersed widely across the high center. No tracks observed from the boat, but past surveys have indicated predation from coyotes and Herons.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 15:03 RIVER MILE: 681.7

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

WHERE SITED: Latitude: 34.745  
Longitude: 90.5453

Approximate Distance to Water: 100 Feet

**NUMBERS SIGHTED:**

Adults: 9  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 1  
Chicks: No

**SUBSTRATE:**

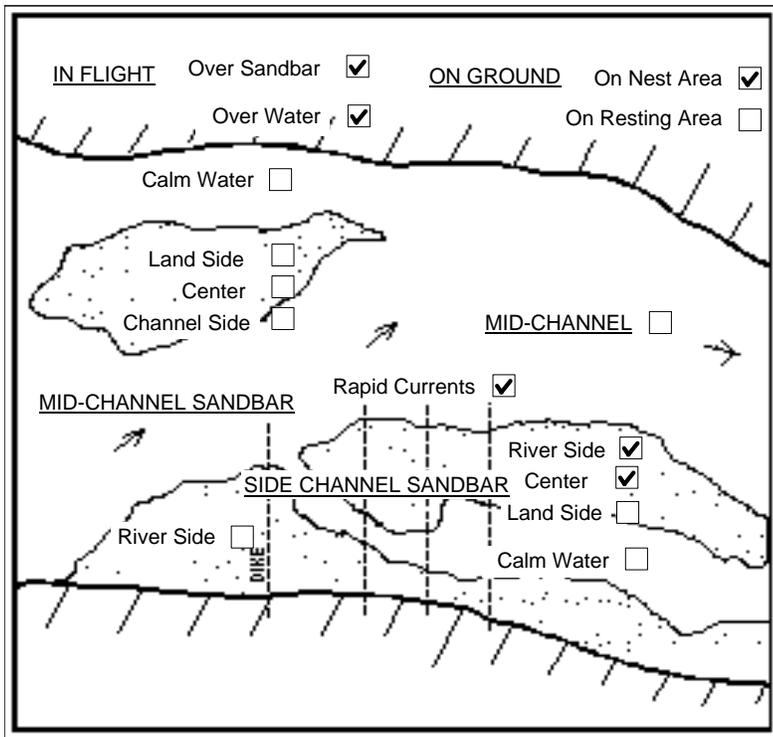
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Cottonwoods  
Distance: 15 Feet

**FIELD CONDITION:**

Temperature: 84 °F  
Rain: No  
Wind: Calm  
% Cloud: 10



**OTHER NOTES:**

Right Bank. Small, unattached sand bar with patches of mud and silt. No tracks observed, Great Blue Heron in back chute.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 15:13 RIVER MILE: 680.0

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

WHERE SITED: Latitude: 34.7300  
Longitude: 90.5656

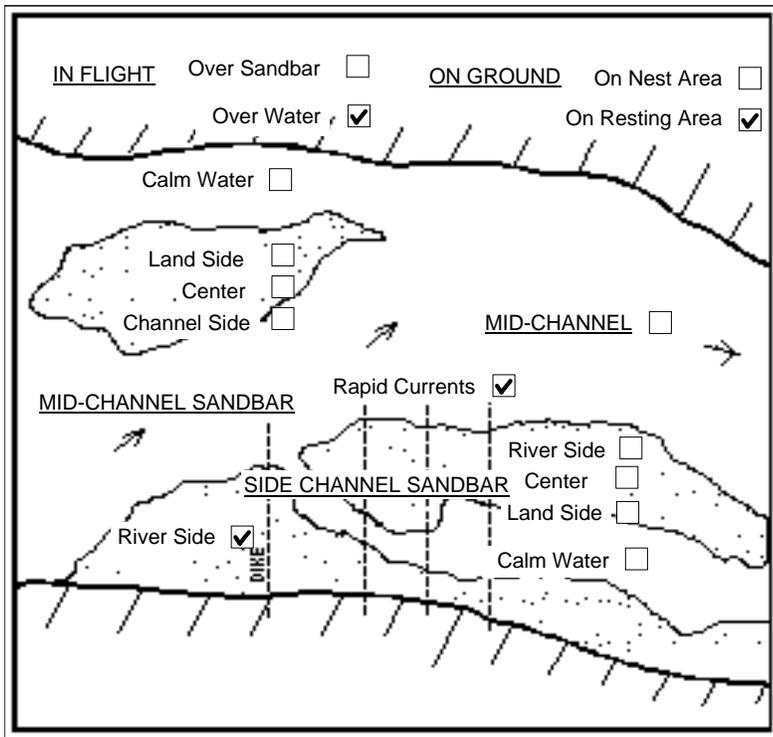
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 64  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 85 °F  
Rain: No  
Wind: calm  
% Cloud: 10



OTHER NOTES:

Left Bank. Resting bar only, attached at this river stage. Some breasting behavior was noted, but no Terns were observed setting inland. Five Terns observed feeding on opposite bank revetment.

MS side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 15:25 RIVER MILE: 676.5

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

WHERE SITED: Latitude: 34.6742  
Longitude: 90.5752

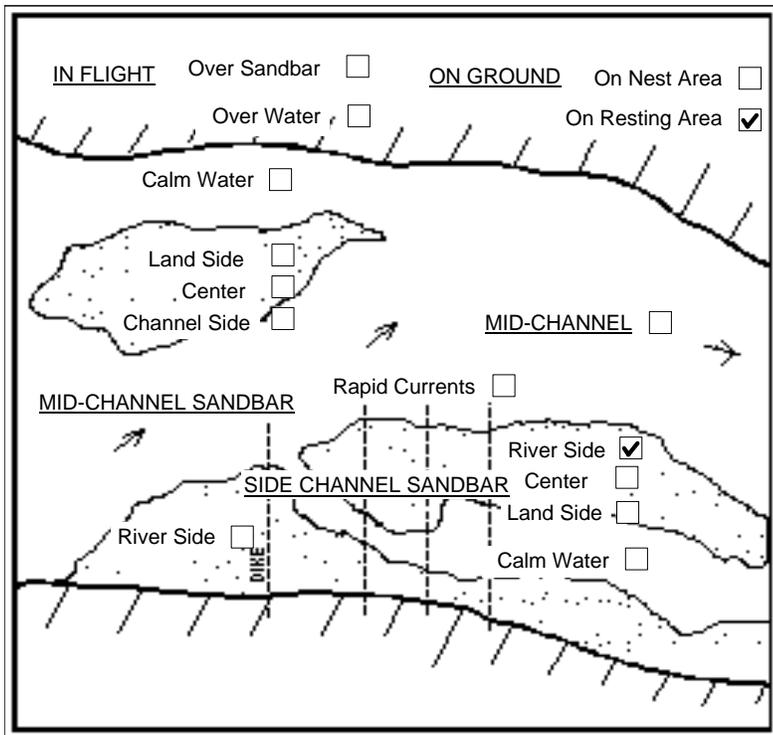
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 41  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 85 °F  
Rain: No  
Wind: calm  
% Cloud: 10



**OTHER NOTES:**

Right Bank. Gently sloping, attached sand bar with patches of gravel. All birds counted along waterline.  
No apparent disturbance or tracks.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 15:49 RIVER MILE: 672.0

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

WHERE SITED: Latitude: 34.6241  
Longitude: 90.5835

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 211  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 30  
Chicks: Yes

**SUBSTRATE:**

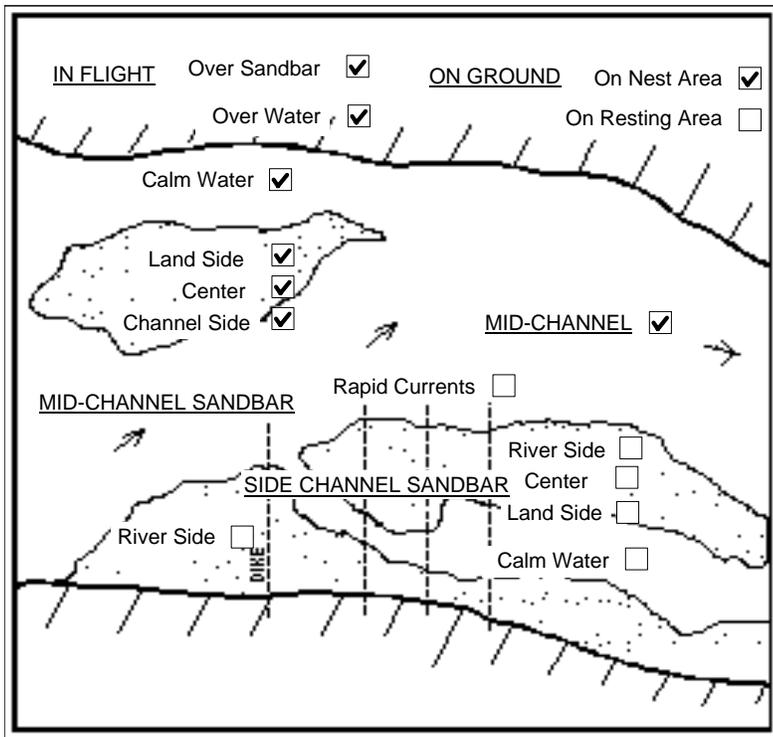
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

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



**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. Chicks from 1-5 days old. Wrack line on top, no other tracks or disturbance signs within colony. Most Terns counted at the water line by drifting. One abandoned nest noted of 30 located. Largemouth Bass and other Sunfish fingerling.

MS side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/27/2005 TIME OF DAY: 16:36 RIVER MILE: 667.5

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

WHERE SITED: Latitude: 34.5625  
Longitude: 90.5536

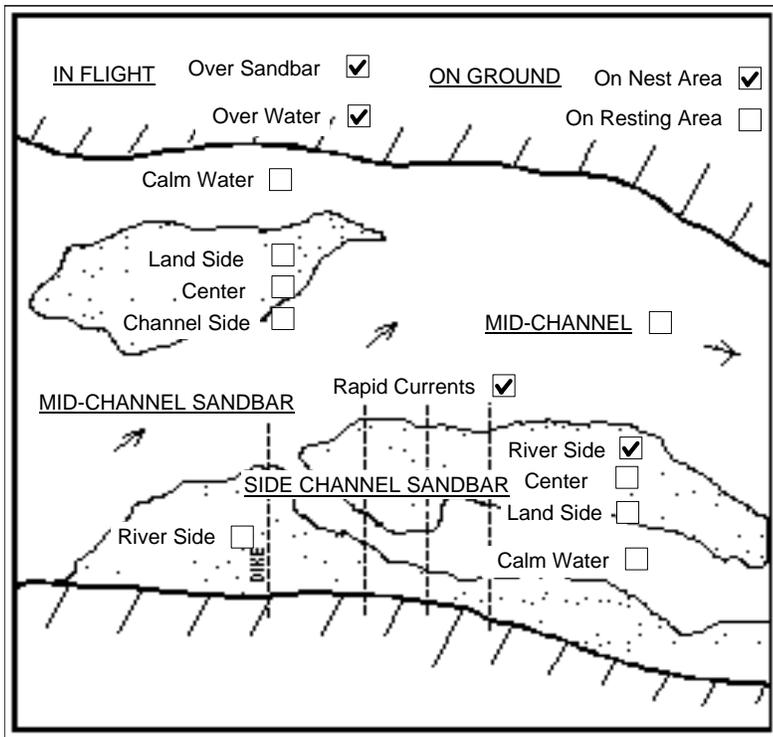
Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:  
Adults: 57  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 1  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

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



**OTHER NOTES:**

Right Bank. Large, high, gravel bar attached to heavily wooded island.. Terns were breasting, fishing and carrying fish on the river side, some setting far inland, though no eggs observed. Racoon tracks along waterline.

AR side

OBSERVERS: Jones, Rumancik, Carpenter, Fowlkes, Campen

RIVER GAGE READING: Helena = 11.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 8:41 RIVER MILE: 655.3

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

WHERE SITED: Latitude: 34.4106  
Longitude: 90.5911

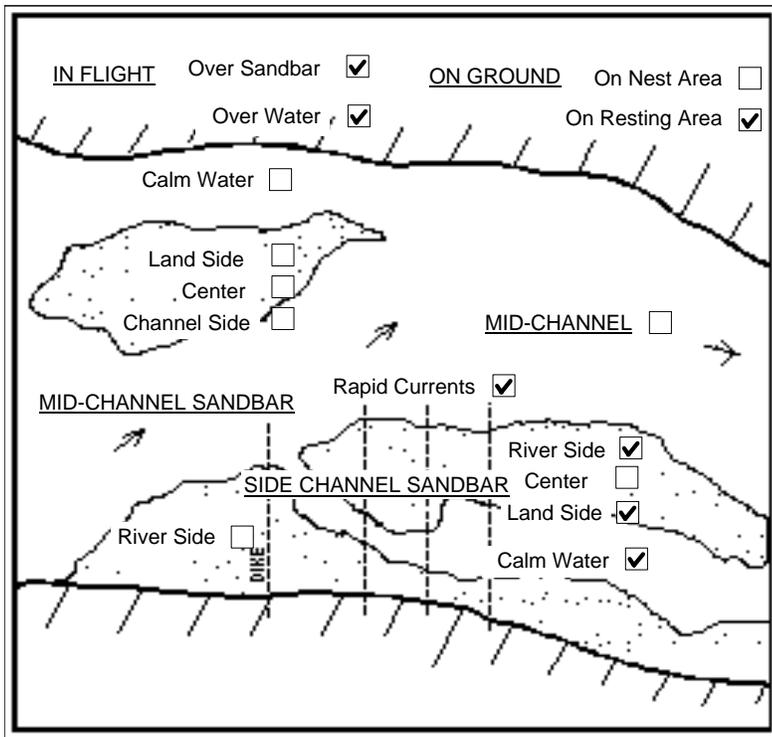
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 24  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

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



**OTHER NOTES:**

Right Bank. Attached medium size sand bar with patches of gravel. Courting behavior but no mobbing, fishing on channel side. Dog and cat tracks present. Two White Pelicans upstream.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 9:22 RIVER MILE: 650.2

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

WHERE SITED: Latitude: 34.3769  
Longitude: 90.6631

Approximate Distance to Water: 200 Feet

**NUMBERS SIGHTED:**

Adults: 41  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 7  
Chicks: No

**SUBSTRATE:**

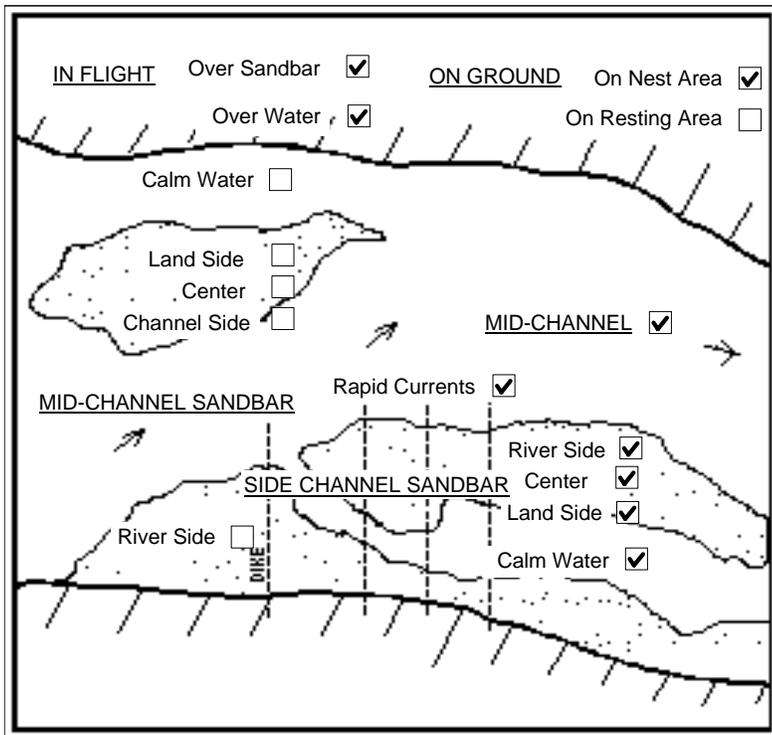
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

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



**OTHER NOTES:**

Left Bank. Clean, low, flat sand bar, unattached on downstream point. Terns utilizing all sides, courting, breasting, and 7 setting inland. No disturbance noted. Great Blue Herons (13) and Purple Martins (2).

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 9:41 RIVER MILE: 647.0

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

WHERE SITED: Latitude: 34.3661  
Longitude: 90.7297

Approximate Distance to Water: 300 Feet

**NUMBERS SIGHTED:**

Adults: 72  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 6  
Chicks: Yes

**SUBSTRATE:**

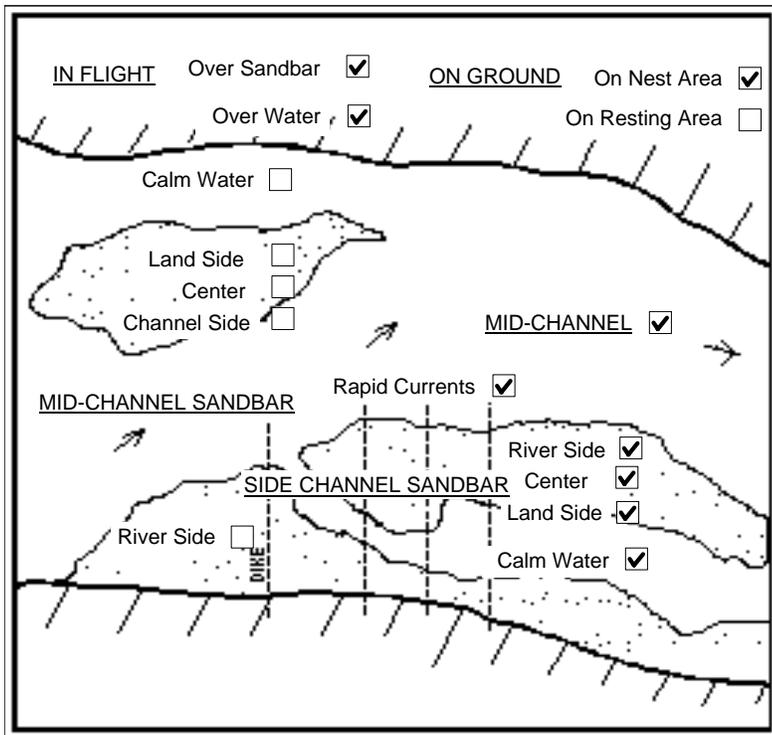
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 200 Feet

**FIELD CONDITION:**

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



**OTHER NOTES:**

Right Bank. Very long, partially attached sand bar with extensions surrounded by water. Heavy wrack line on high ridge. Most of colony is on high attached bar. Ideal bar for multiple river stages. Newly hatched chicks and evidence of coyote and heron predation, some abandoned eggs. Terns fishing on upstream dike ends and opposite bank revetments.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 10:14 RIVER MILE: 643.4

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

WHERE SITED: Latitude: 34.3485  
Longitude: 90.7658

Approximate Distance to Water: 300 Feet

**NUMBERS SIGHTED:**

Adults: 74  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 5  
Chicks: Yes

**SUBSTRATE:**

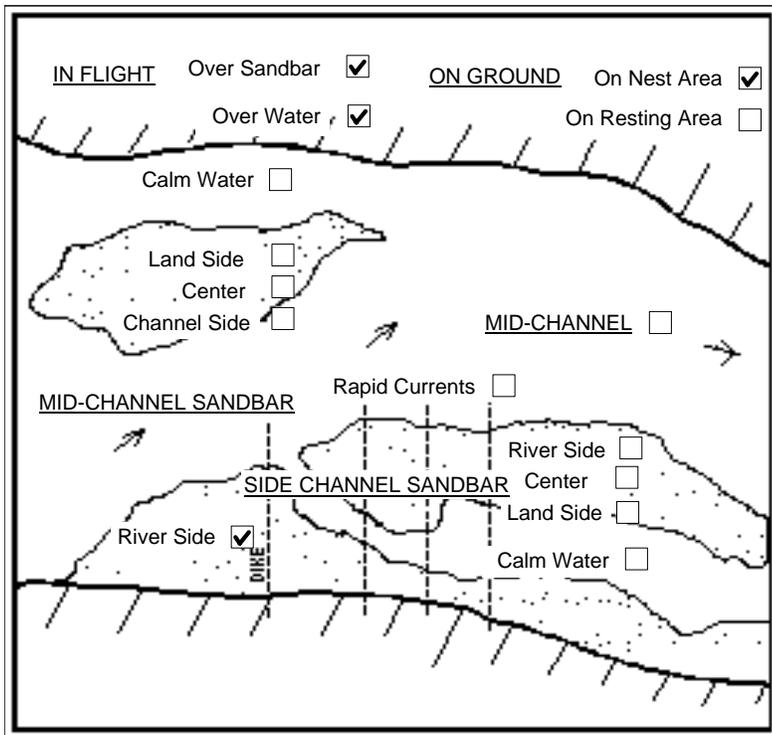
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

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



**OTHER NOTES:**

Left Bank. Attached, convoluted bar of sand, mud and gravel. Five Terns observed setting on scrapes. One day old chicks. DNA collected from 1 egg. Signs of coyote predation, no other tracks.

MS

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 10:39 RIVER MILE: 640.0

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

WHERE SITED: Latitude: 34.3064  
Longitude: 90.7400

Approximate Distance to Water: 300 Feet

**NUMBERS SIGHTED:**

Adults: 14  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 1  
Chicks: No

**SUBSTRATE:**

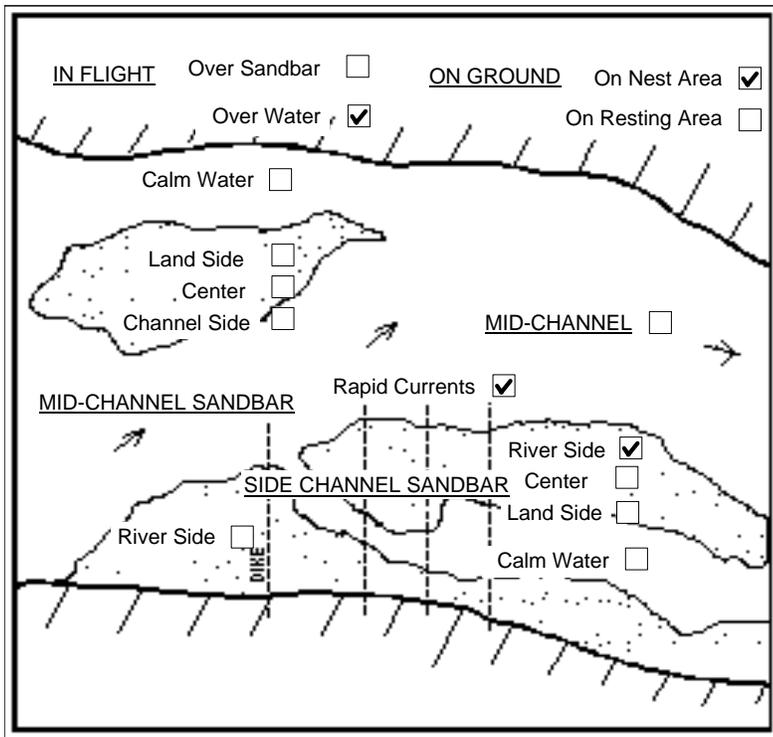
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 84 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 20



**OTHER NOTES:**

Right Bank. High, gently sloping, clean, unattached sand bar. One Tern setting. No signs of disturbance.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 10:55 RIVER MILE: 637.0

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

WHERE SITED: Latitude: 34.2764  
Longitude: 90.7669

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 34  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 5  
Chicks: No

SUBSTRATE:

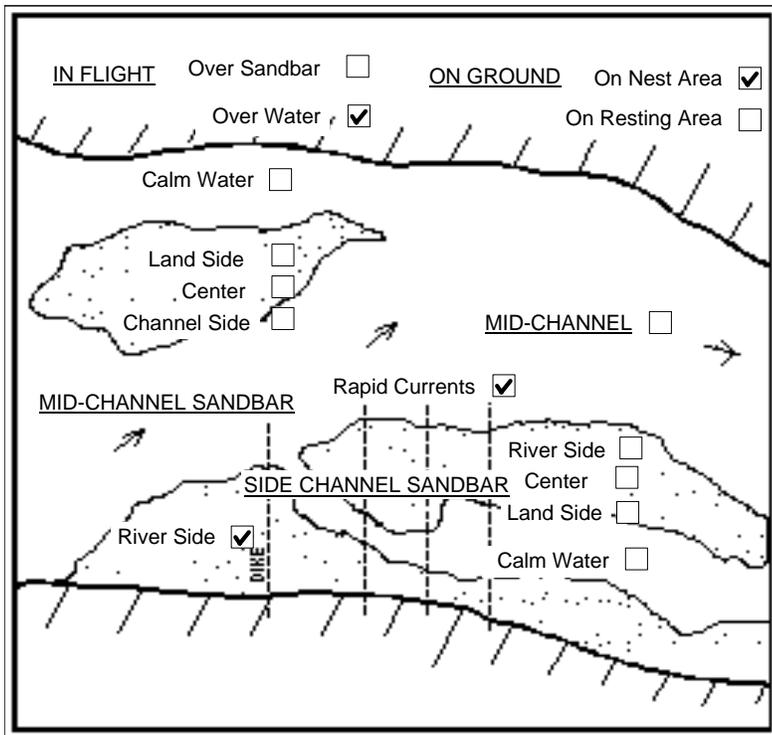
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 84 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 20



OTHER NOTES:

Right Bank. Attached, river side bar bordering chute behind Island #63 Bar Revetment. No mobbing behavior, but one nest observed with 3 eggs. Coyote and ATV tracks abundant

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 11:24 RIVER MILE: 629.3

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

WHERE SITED: Latitude: 34.2203  
Longitude: 90.8483

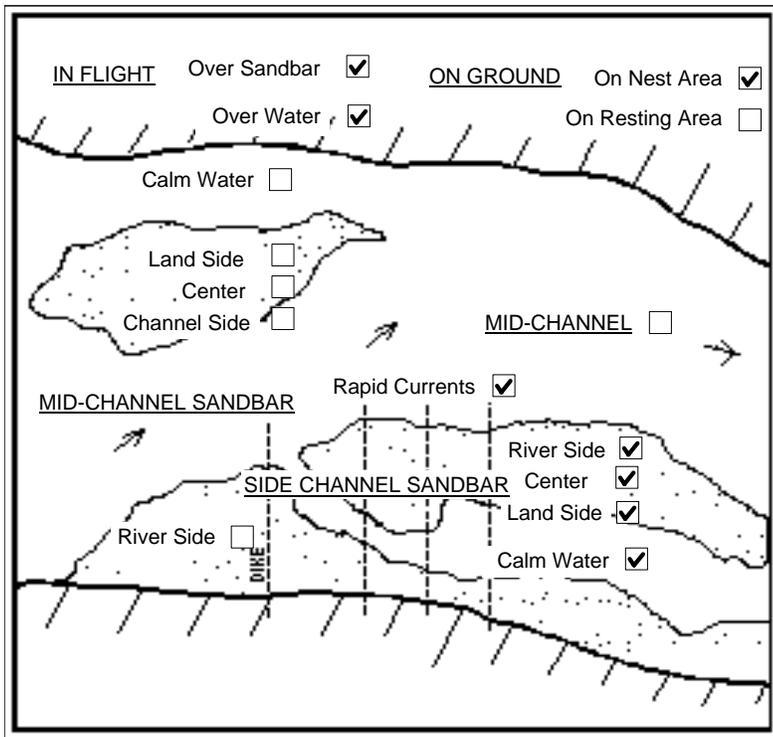
Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:  
Adults: 34  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 4  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 84 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Large, attached sand bar with light debris field and vegetation upstream from colony. Nests on high, flat, center with coyote predation observed at 3 nests. Breasting and feeding on both sides. Mobbing light. Great Blue Heron and deer tracks also present.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 12:00 RIVER MILE: 624.0

LOCALITY: Coahoma MS SITE NAME: Sunflower Cut-Off  
County/Parish State

WHERE SITED: Latitude: 34.1725  
Longitude: 90.8997

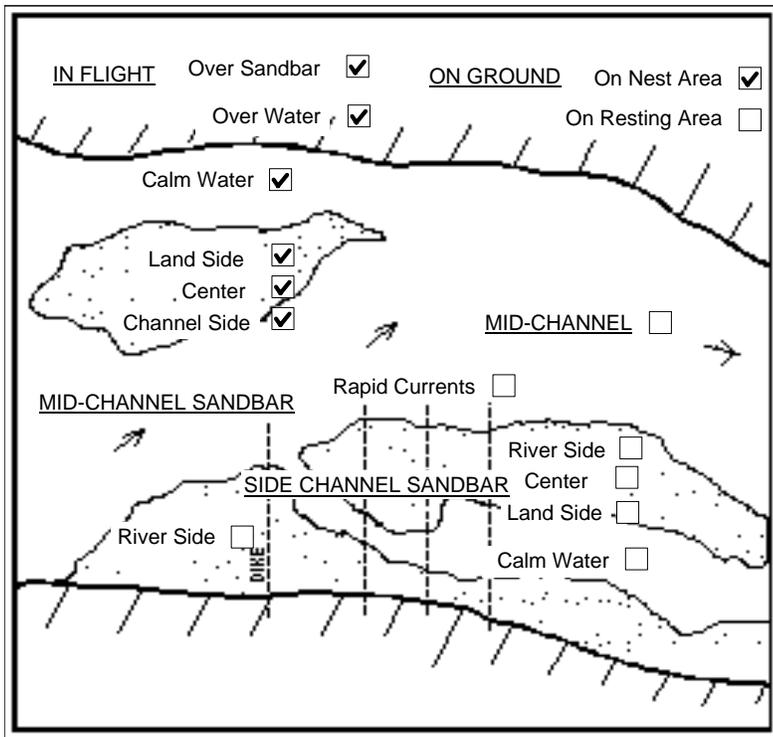
Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:  
Adults: 83  
Juveniles: \_\_\_\_\_  
Eggs: 1  
Nests: 7  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: 0 Feet

FIELD CONDITION:  
Temperature: 84 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Small, barely emergent, low, flat, mid-channel bar, unattached at entrance to Desoto Lake. New colony just being established with no more than 1 egg per scrape. Turtle tracks evident, but no other signs of disturbance.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 12:47 RIVER MILE: 623.0

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

WHERE SITED: Latitude: 34.1583  
Longitude: 90.9303

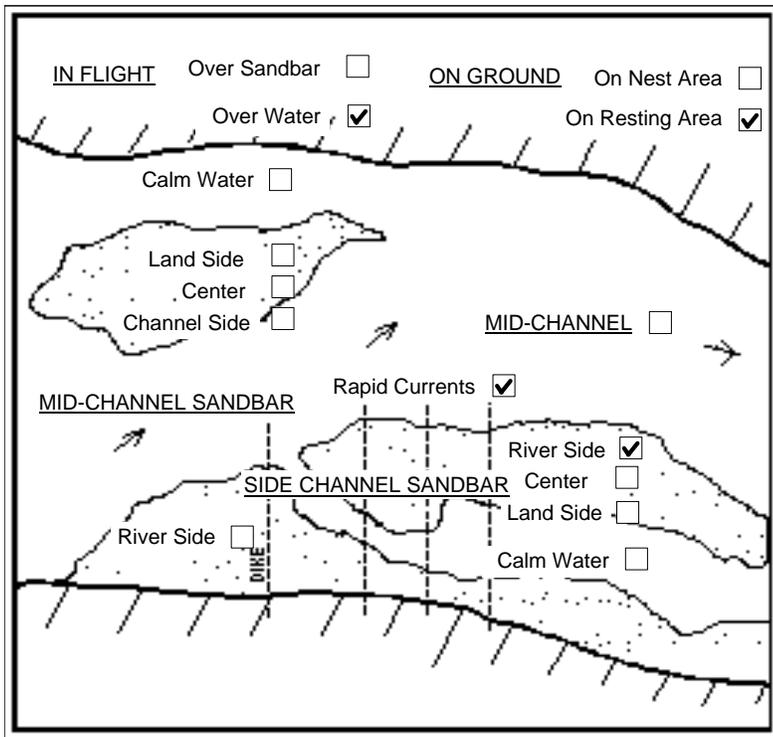
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 11  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 84 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Attached bar of mostly gravel with stand of hardwoods 1/2 mile upstream. Resting bar only, though a Great Blue Heron illicited mobbing, no nests or setting Terns were observed.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 13:05 RIVER MILE: 619.9

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

WHERE SITED: Latitude: 34.1150  
Longitude: 90.9490

Approximate Distance to Water: 600 Feet

NUMBERS SIGHTED:

Adults: 156  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 5  
Chicks: Yes

SUBSTRATE:

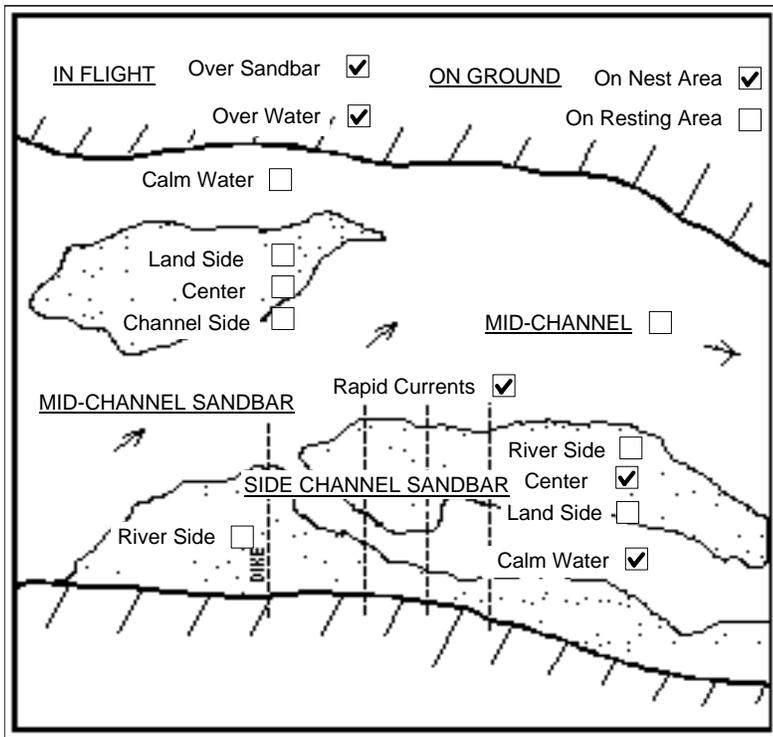
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows/Cottonwoods  
Distance: 800 Feet

FIELD CONDITION:

Temperature: 84 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Long, large, unattached, rippled sand bar with nests along length of bar's high center. Terns  
breasting and feeding both sides. No fresh signs of disturbance. Most Terns resting at waterline with a  
few feeding along opposite bank. Chicks 1-4 days old. Three DNA egg samples collected. Great Blue  
Hérons and swallows present.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 13:15 RIVER MILE: 619.0

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: 100 Feet

**NUMBERS SIGHTED:**

Adults: 90  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 30  
Chicks: No

**SUBSTRATE:**

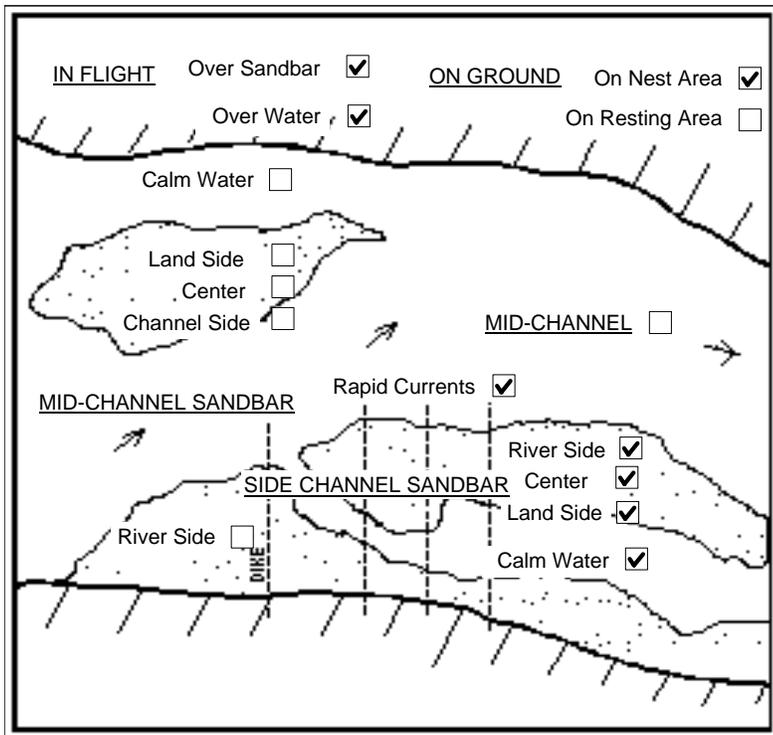
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows/Cottonwoods  
Distance: 800 Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Left Bank. High, small, unattached, downstream point from previous colony (100ft. x 300ft.). Coyote tracks evident. Gizzard Shad fingerling.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 13:30 RIVER MILE: 616.0

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: 0 Feet

**NUMBERS SIGHTED:**

Adults: 8  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

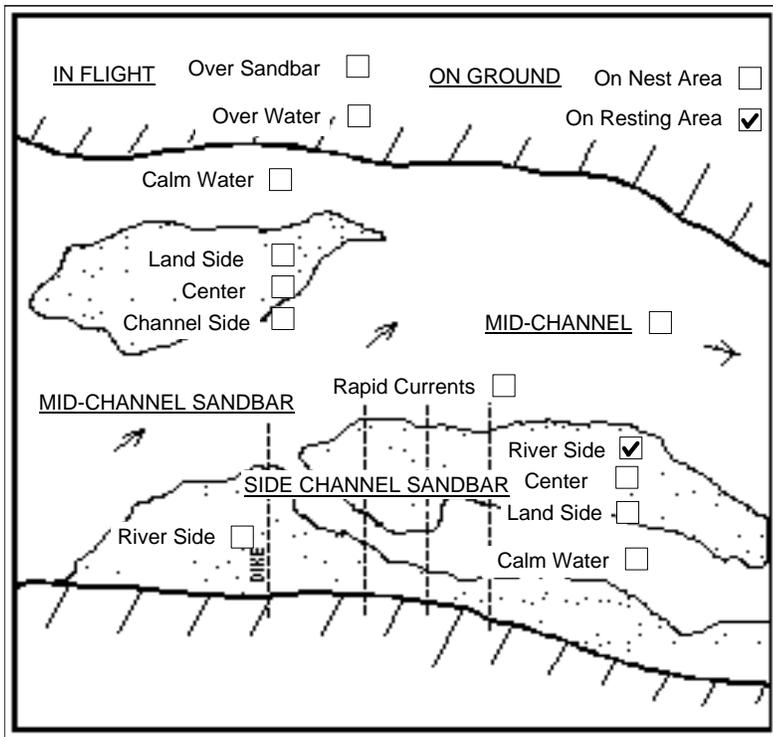
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: 0 Feet

**FIELD CONDITION:**

Temperature: 84 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Small, attached sand bar, resting at the water line  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 13:55 RIVER MILE: 611.5

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

WHERE SITED: Latitude: 34.0292  
Longitude: 90.8982

Approximate Distance to Water: 100 Feet

**NUMBERS SIGHTED:**

Adults: 225  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 35  
Chicks: No

**SUBSTRATE:**

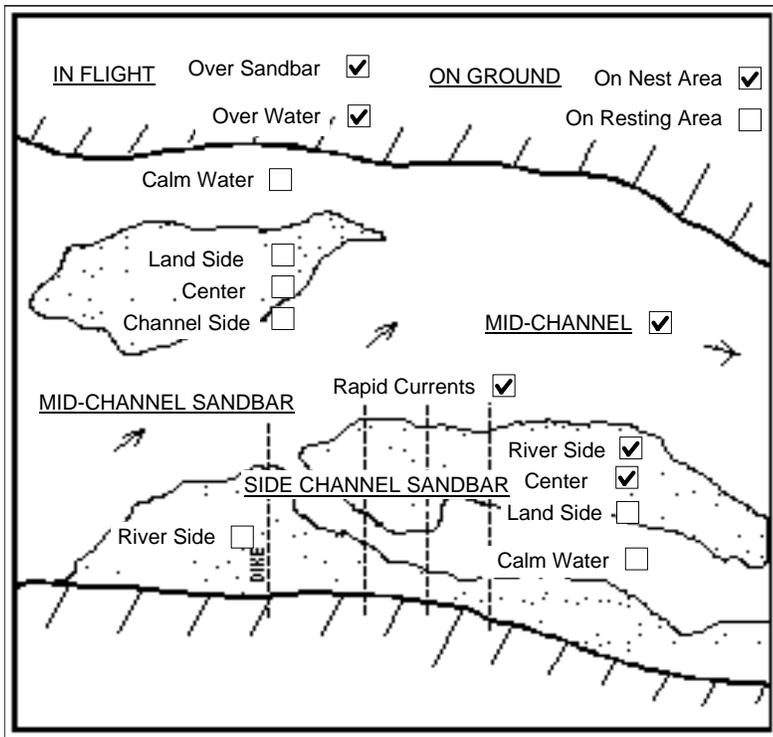
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: S 3-5 mph  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Long series of unattached sand bars along dike field, with colony dispersed 1 mile in length by 1/4 mile wide, but concentrated on highest downstream point. No tracks or signs of disturbance. Terns breasting on channel side and feeding on upstream dike. One egg sampled for DNA. No tracks.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

# FIELD SIGHTING DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 14:05 RIVER MILE: 610.0

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: 20 Feet

**NUMBERS SIGHTED:**

Adults: 25  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 4  
Chicks: No

**SUBSTRATE:**

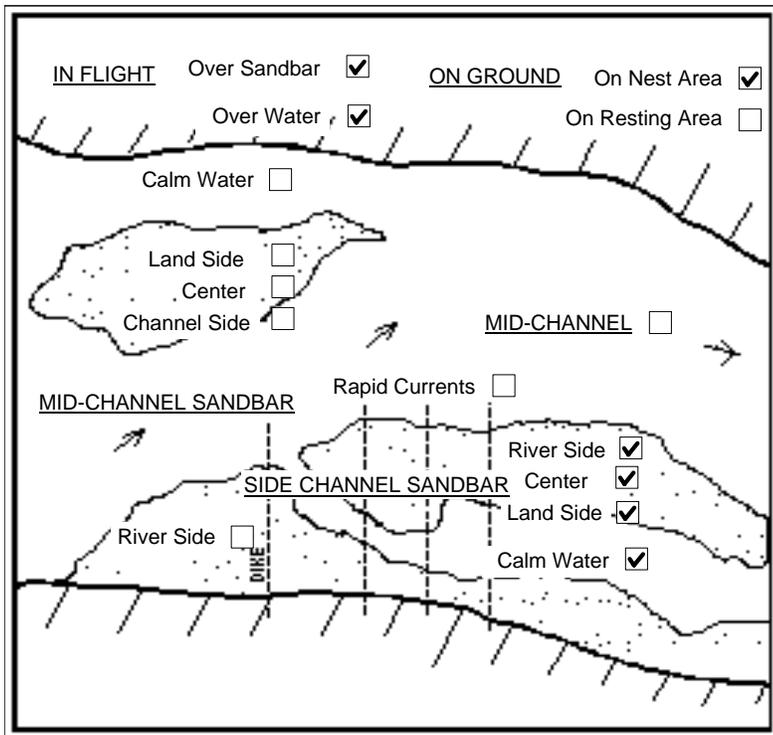
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 50 Feet

**FIELD CONDITION:**

Temperature: 84 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Small sand bar 1/2 mile downstream from larger colony.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 14:20 RIVER MILE: 608.2

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

WHERE SITED: Latitude: 34.0233  
Longitude: 90.9667

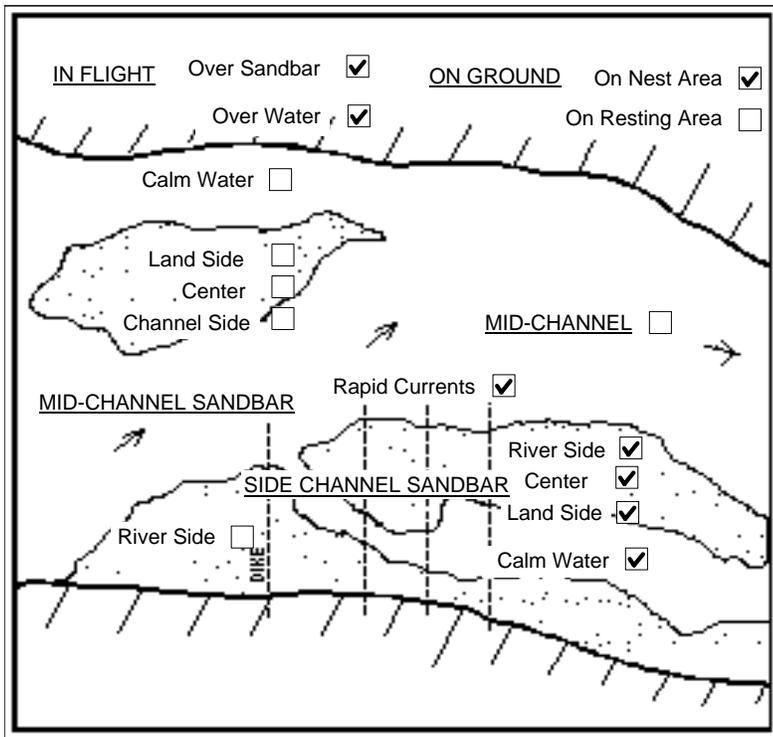
Approximate Distance to Water: 600 Feet

NUMBERS SIGHTED:  
Adults: 328  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 113  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: 0 Feet

FIELD CONDITION:  
Temperature: 86 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Medium size sand bar about 1/4 mile in length, unattached, high and flat. Nests in soft sand along bar's center. Mobbing, but no chicks observed. No tracks

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 14:48 RIVER MILE: 603.0

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

WHERE SITED: Latitude: 33.9898  
Longitude: 91.0500

Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:

Adults: 37  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:

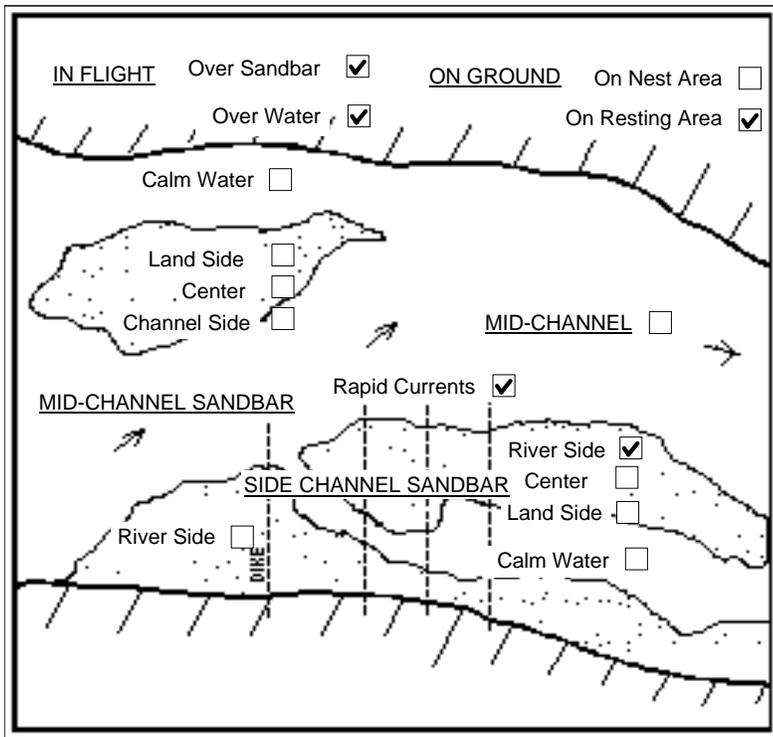
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Right Bank. Small, low, flat sand bar with some debris. Most Terns resting at waterline or fishing river side. Resting bar only with no signs of disturbance.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Helena = 10.8  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 14:55 RIVER MILE: 599.0

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

WHERE SITED: Latitude: 33.9571  
Longitude: 91.0798

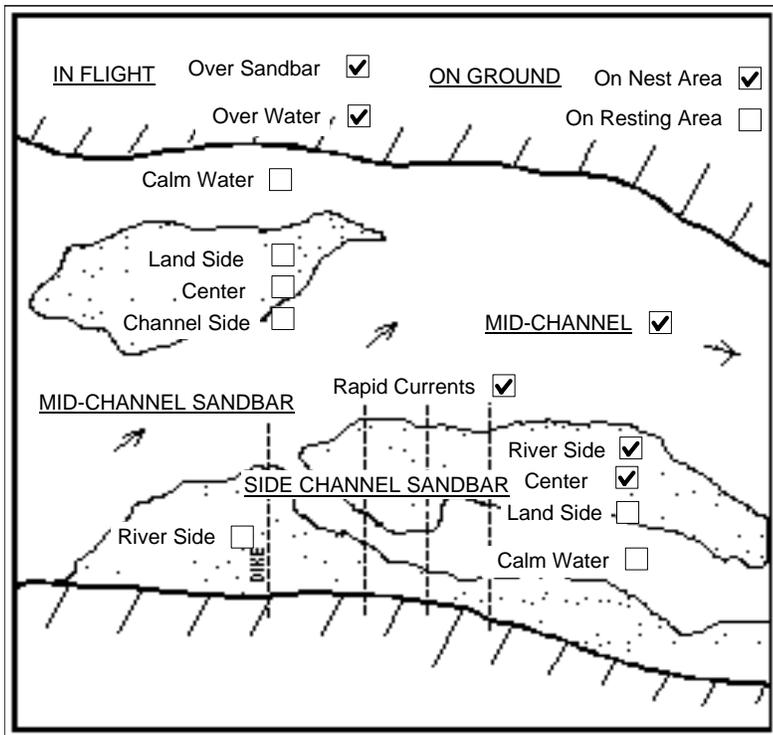
Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:  
Adults: 92  
Juveniles: Yes  
Eggs: 2  
Nests: 15  
Chicks: Yes

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 85 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 30



OTHER NOTES:

Left Bank. Large, attached point bar with undulating and dissected mud and sand. Nests widely scattered with Terns breasting on river side, carrying fish, and fishing opposite bank at White River mouth. Mobbing light. First and one of only two colonies where juveniles are seen during 2005 survey. No tracks or recreation signs which is unusual for this bar.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 15:15 RIVER MILE: 595.0

LOCALITY: Desha AR SITE NAME: Victoria Bend Dikes  
County/Parish State

WHERE SITED: Latitude: 33.9295  
Longitude: 91.0186

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 369  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 119  
Chicks: No

SUBSTRATE:

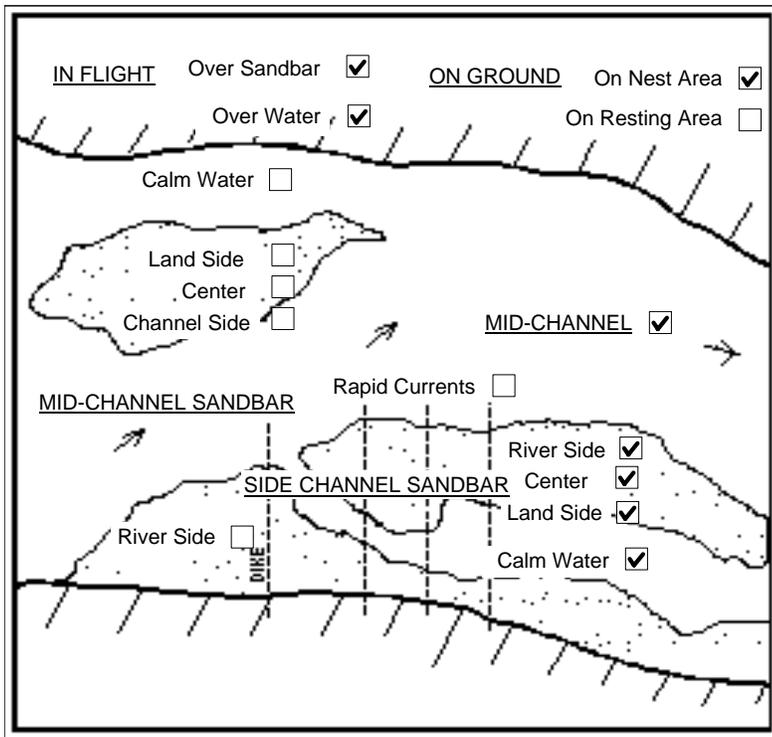
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Right Bank. Large, broad, rounded, attached sand bar with patches of silt and mud. Nests in clusters close proximity with fishing and breasting on both sides. Mobbing intense. No tracks or signs of disturbance. Two eggs sampled for DNA.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 15:37 RIVER MILE: 589.0

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

WHERE SITED: Latitude: 33.8415  
Longitude: 91.0632

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 44  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 8  
Chicks: No

SUBSTRATE:

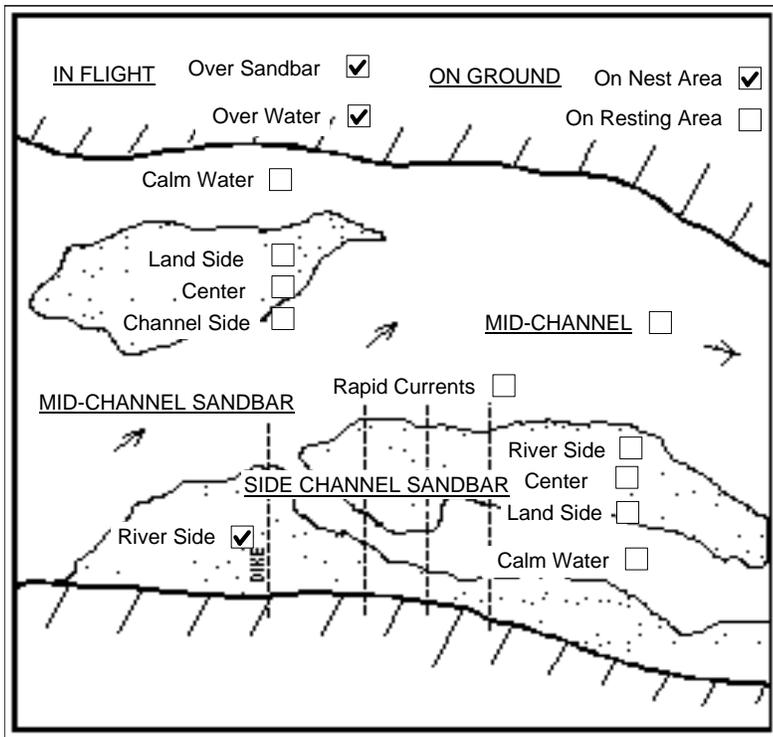
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Long, attached, undulating sand bar with a few Terns setting far inland on 8 suspected nests, though not confirmed. Terns fishing calm waters of inlet within colony. No tracks or other disturbance factors. Two Great Blue Herons at waterline.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 15:42 RIVER MILE: 587.5

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

WHERE SITED: Latitude: 33.8333  
Longitude: 91.0500

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 47  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 10  
Chicks: No

**SUBSTRATE:**

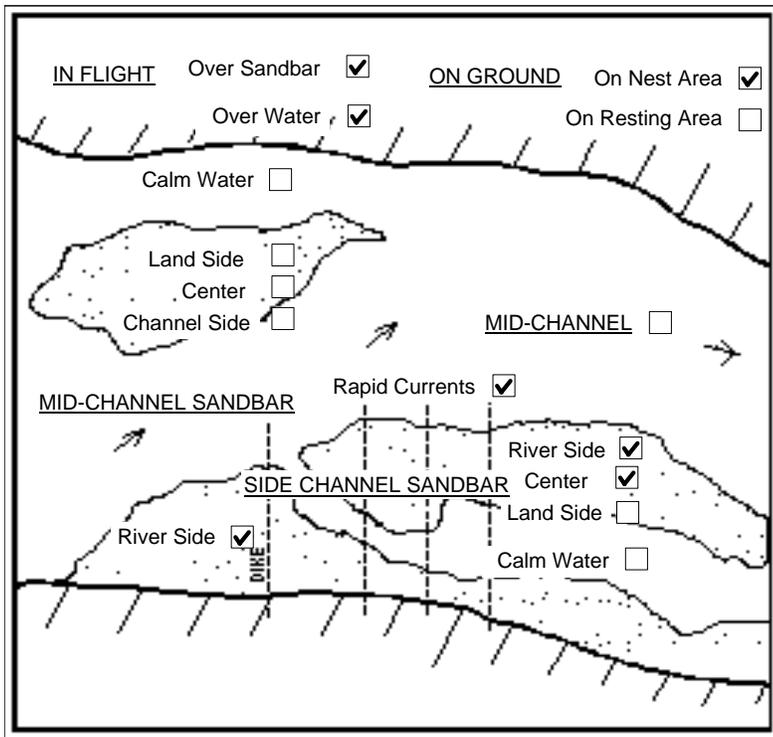
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Left Bank. Just downstream from upper colony, 10 birds setting inland for nest count, 27 fishing on opposite bank revetment. No disturbance factors noted.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 15:52 RIVER MILE: 583.5

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

WHERE SITED: Latitude: 33.7860  
Longitude: 91.0517

Approximate Distance to Water: 1000 Feet

**NUMBERS SIGHTED:**

Adults: 84  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 9  
Chicks: No

**SUBSTRATE:**

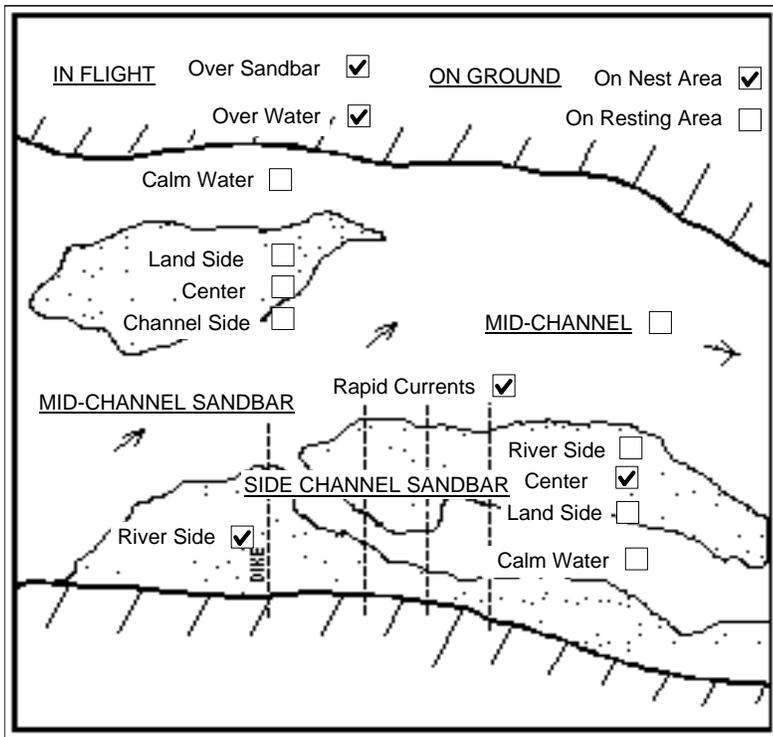
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 800 Feet

**FIELD CONDITION:**

Temperature: 86 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Broad, wide, attached, flat-topped, bar of sand and gravel and wrack lines on higher ground.  
Nests dispersed for 1 mile along wrack line. Due to swift currents and shallow water drift count yielded 9  
nests with Terns setting inland. Two Canada Geese, 1 Great Blue Heron.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 16:04 RIVER MILE: 578.0

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

WHERE SITED: Latitude: 33.7502  
Longitude: 91.1336

Approximate Distance to Water: 600 Feet

**NUMBERS SIGHTED:**

Adults: 89  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 9  
Chicks: No

**SUBSTRATE:**

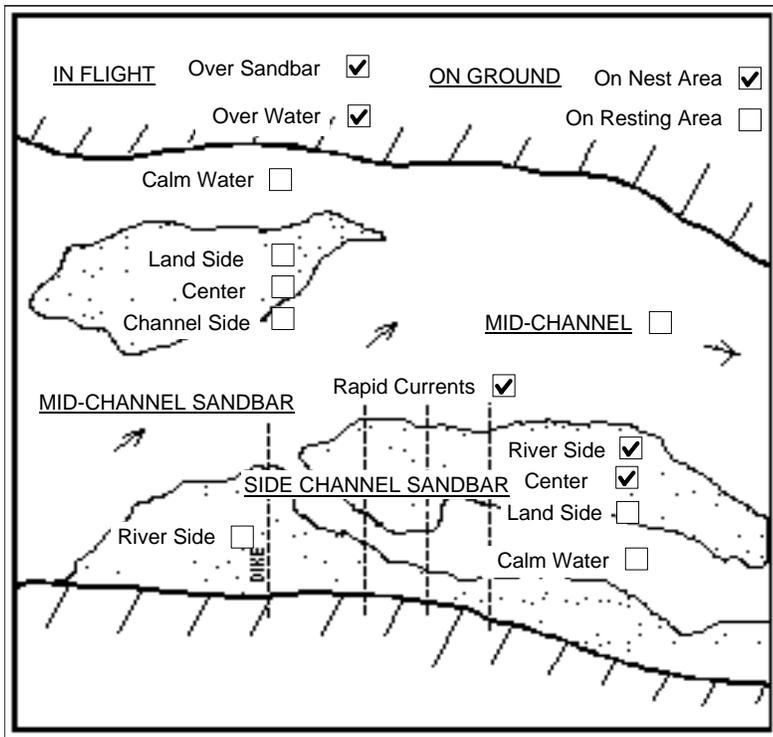
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 86 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Left Bank. Long, flat, unattached sand bar with no debris or wrack lines. No signs of disturbance. Most Terns resting at waterline, 9 observed setting on nests. Widely dispersed, drift count only. No disturbance or tracks observed.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 16:20 RIVER MILE: 573.5

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

WHERE SITED: Latitude: 33.7087  
Longitude: 91.1706

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 67  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

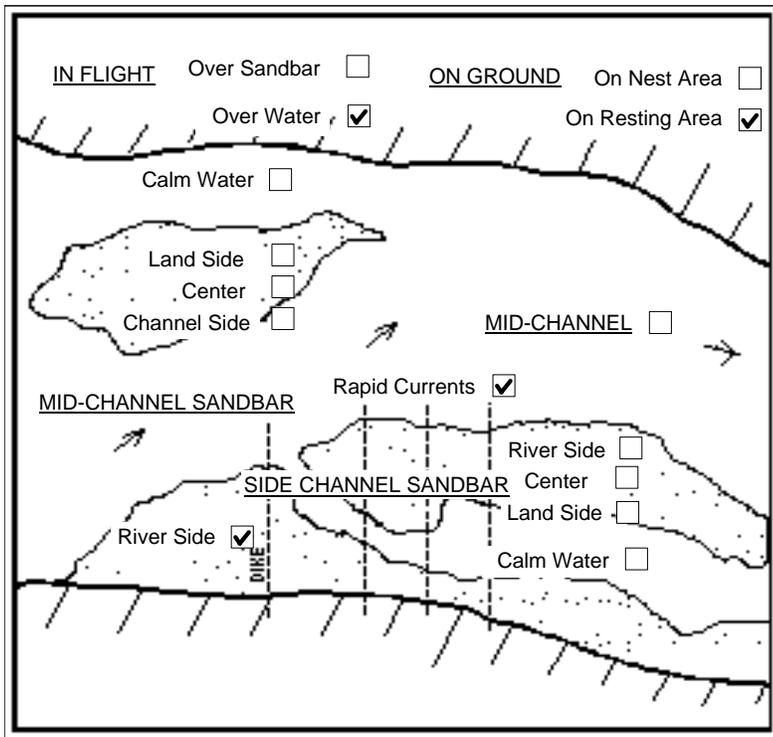
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 86 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Small, low, attached sand bar with all birds counted at the waterline. No nesting or reproductive behavior observed. Two Bald Eagles, one with fish on upstream end of bar.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 16:29 RIVER MILE: 568.0

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

WHERE SITED: Latitude: 33.6781  
Longitude: 91.2242

Approximate Distance to Water: 1000 Feet

**NUMBERS SIGHTED:**

Adults: 72  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 5  
Chicks: No

**SUBSTRATE:**

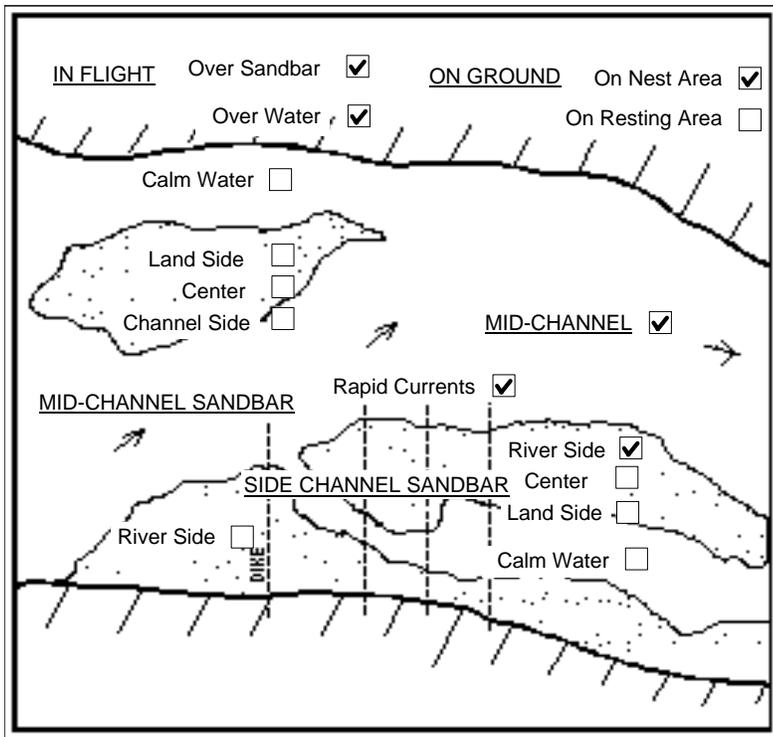
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows/Cottonwoods  
Distance: 1500 Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Left Bank. Wide, attached, sand and gravel bar. Most Least Terns were counted along waterline, but 5 setting indicated nests inland over 1000 ft. from water on high, gravel and debris. Reproductive behavior river side. ATV tracks and 9 Great Blue Herons.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 16:46 RIVER MILE: 564.0

LOCALITY: Desha AR SITE NAME: Chicot Landing Dikes  
County/Parish State

WHERE SITED: Latitude: 33.6275  
Longitude: 91.1498

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 69  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 2  
Chicks: No

**SUBSTRATE:**

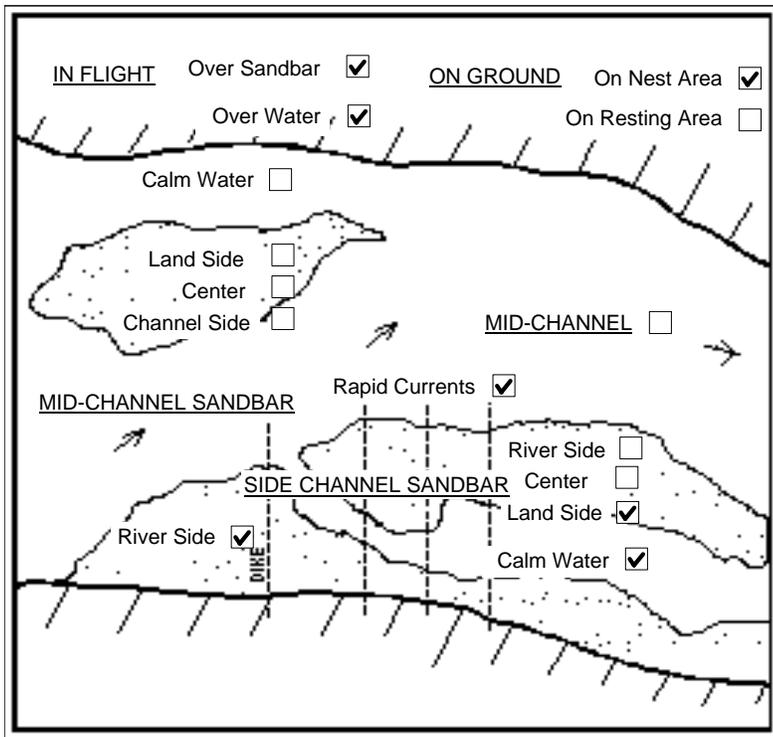
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Large, attached, sand bar behind trailer dikes above Choctaw Island. Terns breasting along channel side. Nests widely scattered. Drift count indicates 2 possible nests.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 17:07 RIVER MILE: 558.0

LOCALITY: Desha AR SITE NAME: Choctaw Bend  
County/Parish State

WHERE SITED: Latitude: 33.5797  
Longitude: 91.1697

Approximate Distance to Water: 200 Feet

**NUMBERS SIGHTED:**

Adults: 43  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 3  
Chicks: No

**SUBSTRATE:**

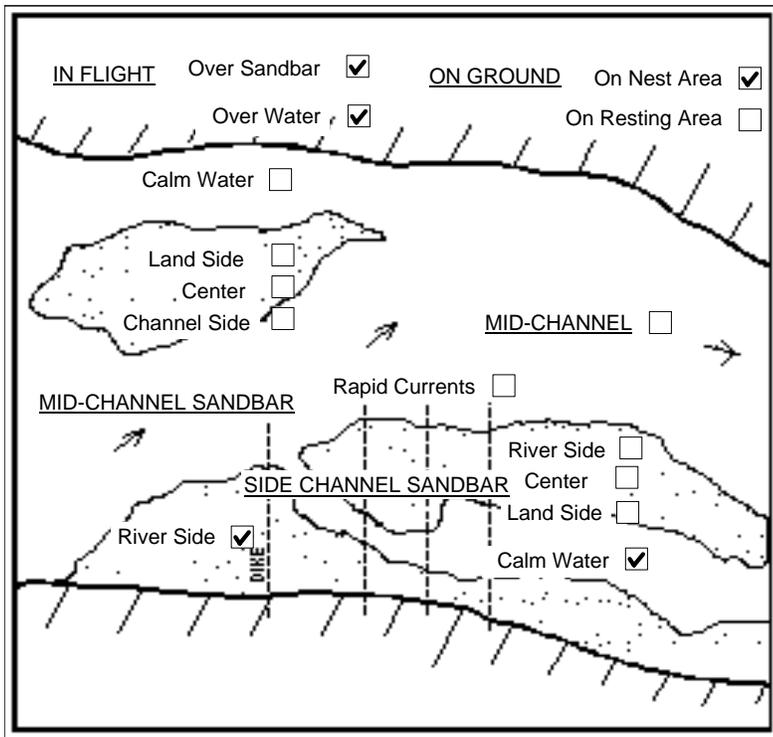
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Attached bar in back chute of Choctaw Bar Island. Three nests observed during drift count. Most counted along waterline. No tracks.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 17:20 RIVER MILE: 550.0

LOCALITY: Washington MS SITE NAME: Ashbrook Cutoff Dikes  
County/Parish State

WHERE SITED: Latitude: 33.5192  
Longitude: 91.1914

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 210  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 12  
Chicks: Yes

SUBSTRATE:

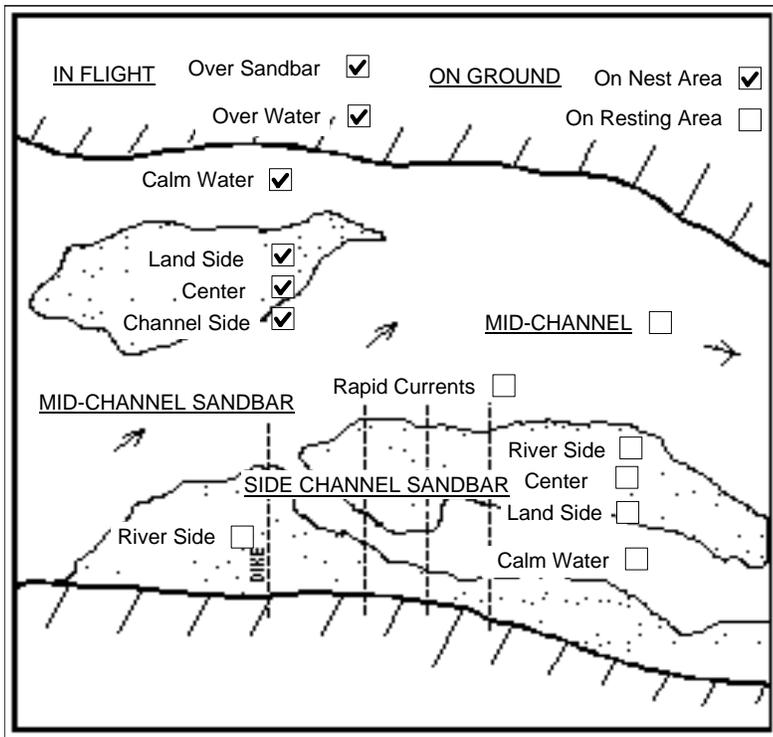
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Small, low, isolated, mid-channel sand bar (1000 ft. long by 100 ft. wide) above dike field. Terns utilizing all sides. Chicks up to 1 week old. Three DNA egg samples from 3 different nest. No tracks or disturbance signs. Possibly a new sand bar with first time colony.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Arkansas City = 13.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 17:58 RIVER MILE: 541.5

LOCALITY: Washington MS SITE NAME: Tarpley Cutoff Dikes  
County/Parish State

WHERE SITED: Latitude: 33.4156  
Longitude: 91.1203

Approximate Distance to Water: 75 Feet

**NUMBERS SIGHTED:**

Adults: 57  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 7  
Chicks: Yes

**SUBSTRATE:**

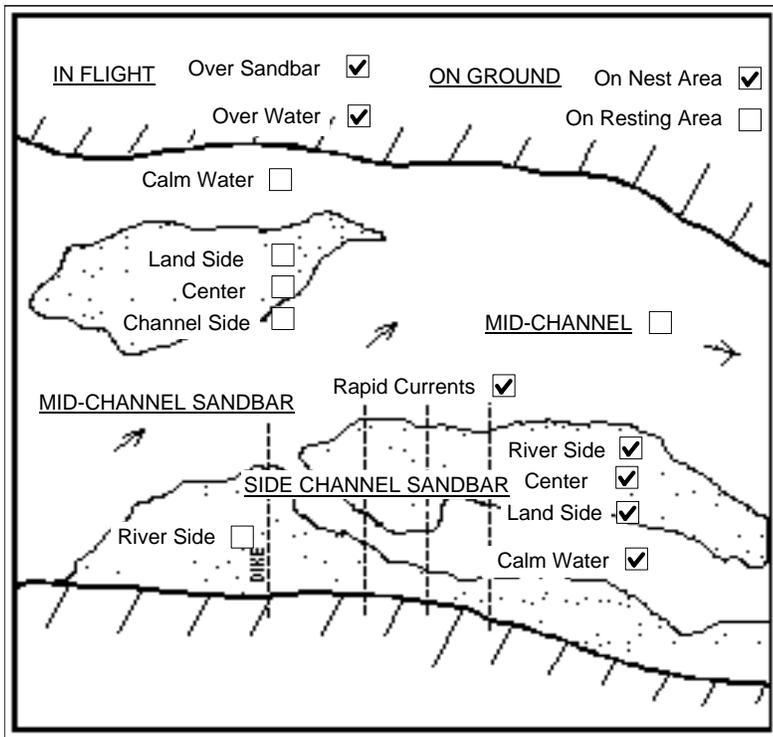
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Small, dissected, isolated, unattached sand bar. Seven nesting toward center, others fishing back chute or resting waterline all sides. Chicks up to 1 week old. No tracks or disturbance.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Greenville = 24.7 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/28/2005 TIME OF DAY: 18:08 RIVER MILE: 540.0

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

WHERE SITED: Latitude: 33.3992  
Longitude: 91.1083

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 528  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 200  
Chicks: Yes

SUBSTRATE:

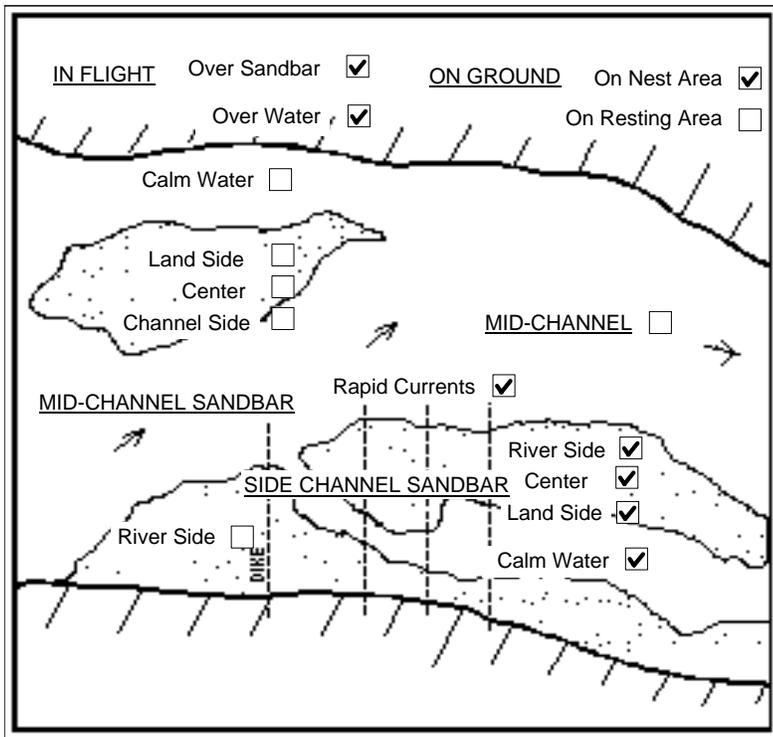
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



OTHER NOTES:

Left Bank. Medium size, unattached sand bar 3 miles upstream from entrance to Greenville harbor. Over 200 Terns setting on nests. Chicks up to 1 week old. Reproductive behavior all sides. No tracks or other signs of disturbance.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, Marcy

RIVER GAGE READING: Greenville = 24.7 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 8:19 RIVER MILE: 533.0

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

WHERE SITED: Latitude: 33.3089  
Longitude: 91.1764

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 700  
Juveniles: \_\_\_\_\_  
Eggs: 2,3,4  
Nests: 22  
Chicks: Yes

SUBSTRATE:

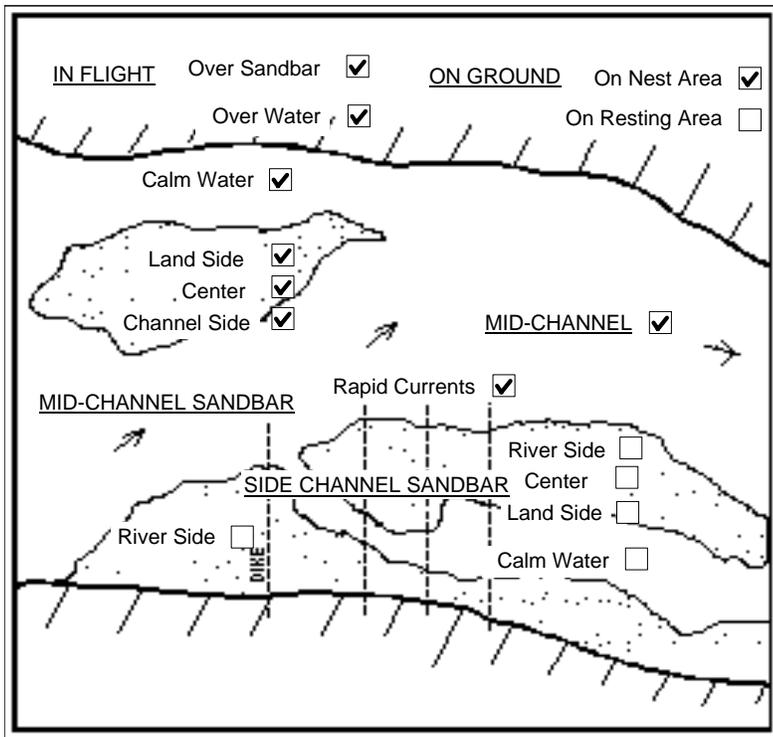
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

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



OTHER NOTES:

Left Bank. Medium size (300 x 600 yds.), flat-topped, 6 foot high sand bar with no tracks or disturbance in evidence. Very dense colony, nests with eggs completely covering higher areas of bar along wrack line at center. Nests with eggs observed = 22. Chicks up to 1 week old. Raptor call induces Terns to flock over water away from colony. DNA from 2 eggs. No tracks or disturbance.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 8:45 RIVER MILE: 528.3

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

WHERE SITED: Latitude: 33.2664  
Longitude: 91.1222

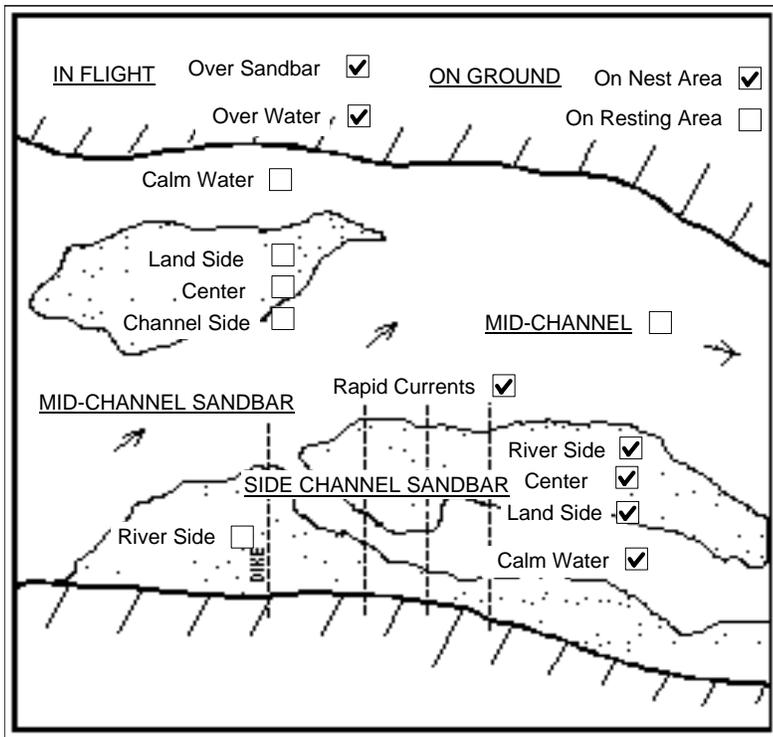
Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:  
Adults: 170  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 2  
Chicks: Yes

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Willows/Grass  
Distance: 75 Feet

FIELD CONDITION:  
Temperature: 82 °F  
Rain: No  
Wind: Calm  
% Cloud: haze



**OTHER NOTES:**

Left Bank. Small, high, clean, unattached sand bar below 1st dike. Approximately 1/4 mile long and wide, with upper end of mud flats. Nests in wrack lines along center. Chicks up to 1 week old. Heavy recreational use by track evidence (human/dogs), but no vandalism observed. Threadfin Shad collected and 2 DNA samples. Killdeers and grackles present with hundreds of dragonflies hatching in landlocked pools. MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 9:41 RIVER MILE: 520.7

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

WHERE SITED: Latitude: 33.1600  
Longitude: 91.0875

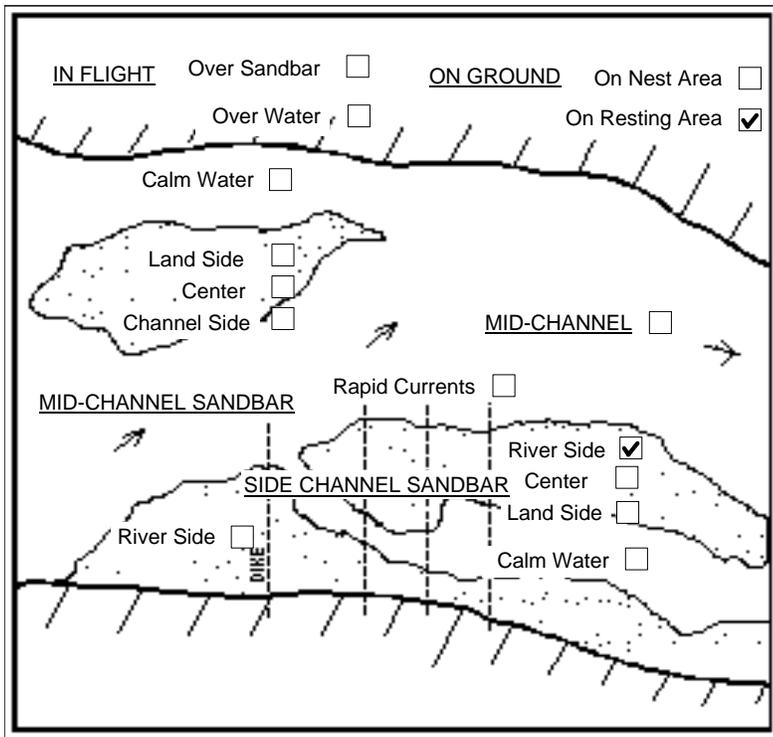
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 8  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 83 °F  
Rain: No  
Wind: N 3-5 mph  
% Cloud: 0



**OTHER NOTES:**

Right Bank. Small, low, flat, sand bar attached to larger wooded island just upstream. All 8 Terns resting at waterline. No tracks or disturbance. Five immature White Ibis in transit mid-channel.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 9:53 RIVER MILE: 518.1

LOCALITY: Washington MS SITE NAME: Kentucky Bend Bar Upper  
County/Parish State

WHERE SITED: Latitude: 33.1403  
Longitude: 91.0899

Approximate Distance to Water: 500 Feet

**NUMBERS SIGHTED:**

Adults: 62  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 10  
Chicks: No

**SUBSTRATE:**

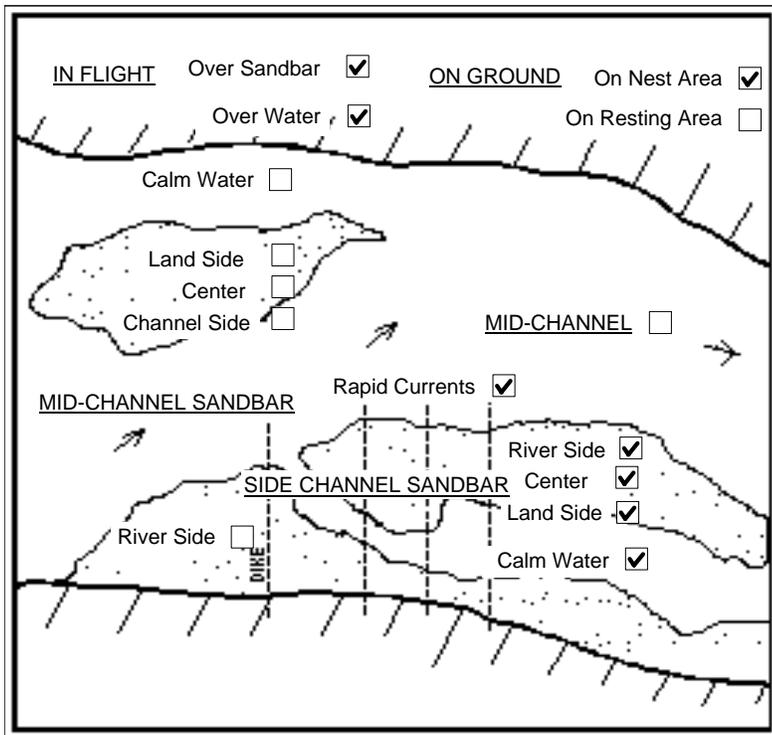
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

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



**OTHER NOTES:**

Right Bank. Unattached, medium size, gently rolling sand bar with 1/3 of nests along wrack line. Coyote tracks meandering from scrape to scrape, no human tracks. One egg sampled for DNA.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 10:12 RIVER MILE: 517.5

LOCALITY: Washington MS COUNTY/Parish: State: SITE NAME: Kentucky Bend Bar Lower

WHERE SITED: Latitude: 33.1214 Longitude: 91.1011

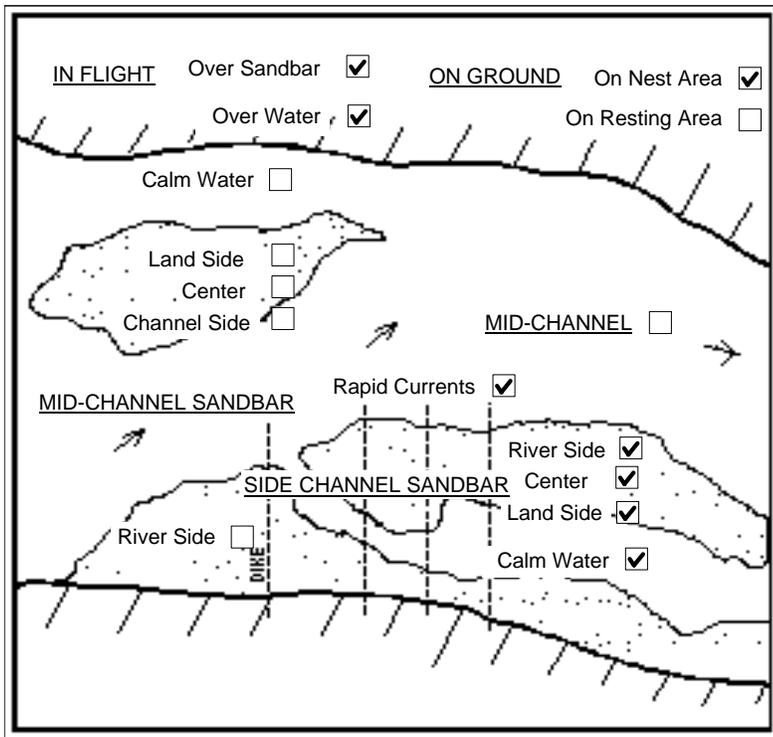
Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:  
Adults: 38  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 8  
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, just 3/4 mile below upper colony between 2nd and 3rd dikes. Colony about 1/4 mile in length.  
Eight Terns setting on nests along wrack line center of bar, the rest counted at waterline. Reproductive  
behavior both sides. No disturbance noted. Great White Heron observed.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 10:27 RIVER MILE: 514.0

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

WHERE SITED: Latitude: 33.0978  
Longitude: 91.1592

Approximate Distance to Water: 200 Feet

**NUMBERS SIGHTED:**

Adults: 61  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 7  
Chicks: No

**SUBSTRATE:**

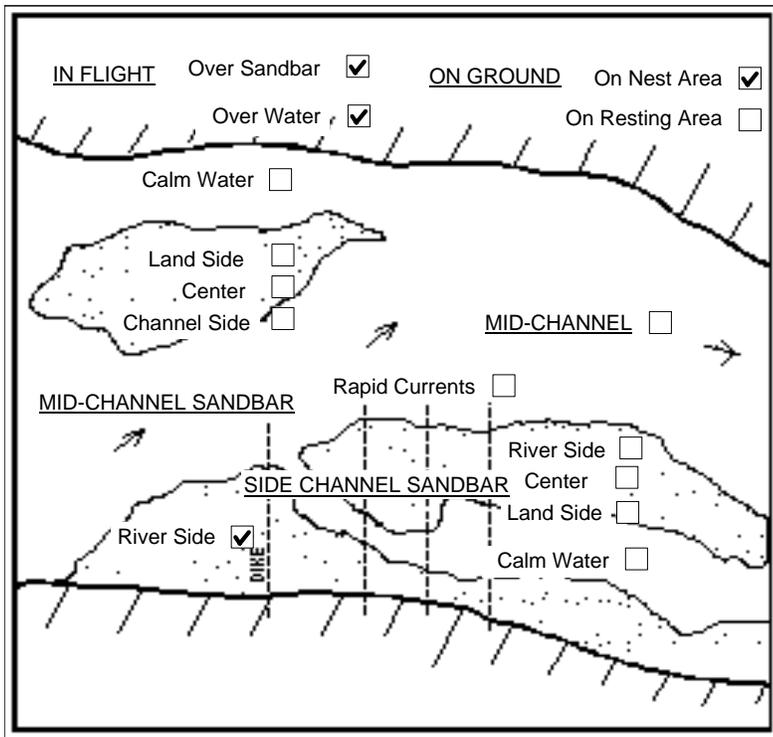
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



**OTHER NOTES:**

Left Bank. Long, attached sand bar. Nests sparsely dispersed length of bar, with 7 setting inland, the rest at waterline. No tracks or predation sign, other than ATV tracks.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 10:45 RIVER MILE: 510.0

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

WHERE SITED: Latitude: 33.0375  
Longitude: 91.1567

Approximate Distance to Water: 100 Feet

**NUMBERS SIGHTED:**

Adults: 49  
Juveniles: \_\_\_\_\_  
Eggs: 3  
Nests: 5  
Chicks: Yes

**SUBSTRATE:**

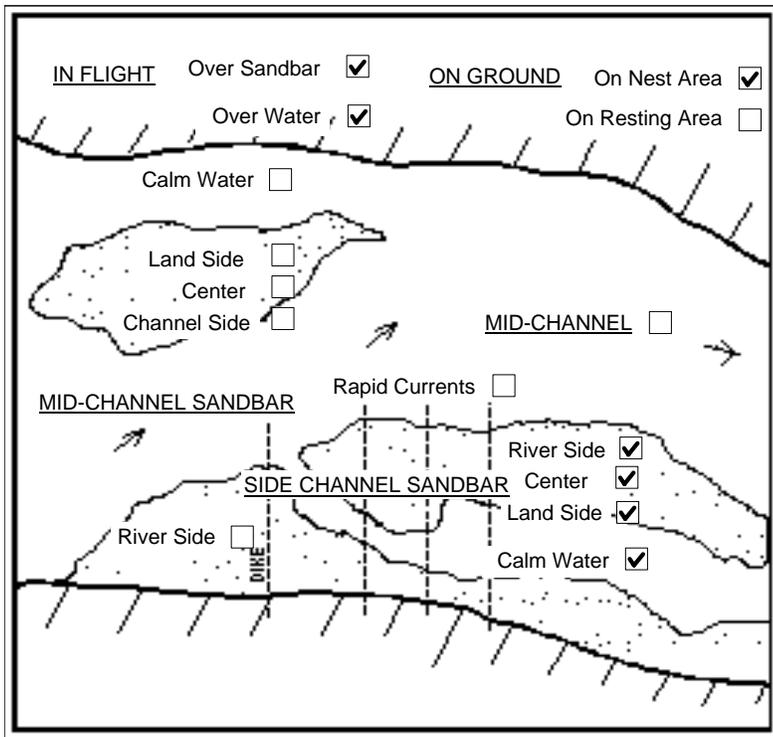
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 200 Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



**OTHER NOTES:**

Right Bank. Small, upstream point of medium size island with large chute backside. Nests on high crests of ripple lines. Chicks up to 1 week old. No signs of disturbance. Other species observed = 1 Anhinga, 1 Comorant, 1 Snowy Egret, and many Roughwing Swallows.

AR side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 11:32 RIVER MILE: 504.0

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

WHERE SITED: Latitude: 32.9645  
Longitude: 91.1366

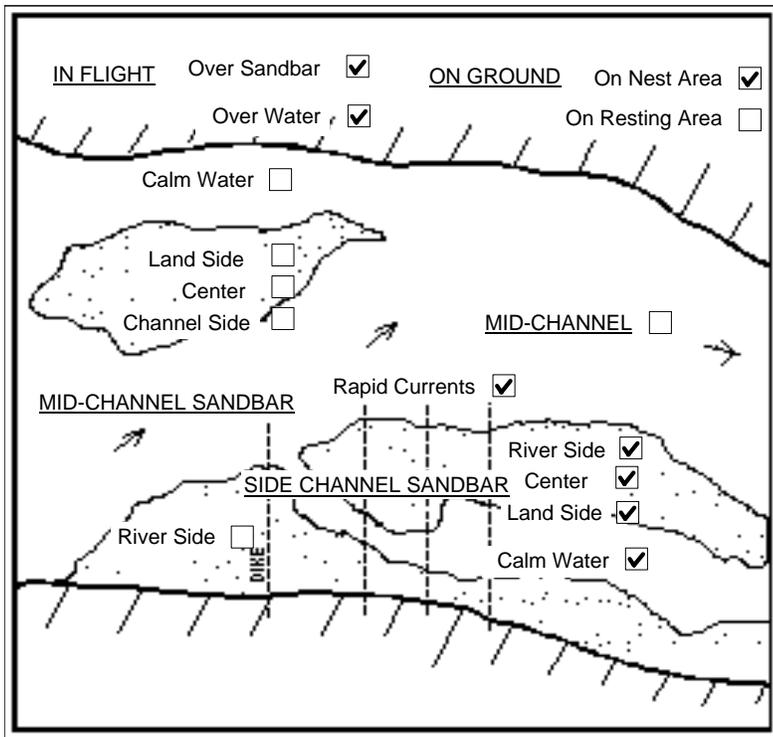
Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:  
Adults: 176  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 28  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 15



**OTHER NOTES:**

Left Bank. Long (3/4 mile), narrow, crescent shaped sand and mud bar in bend of Sarah Cut-Off, unattached at present river stage. A few birds are nesting on high, attached bank, but most of colony is on lower, unattached portion of bar. Drift count = 28 on nests. Fifteen are fishing opposite bank. No disturbance or tracks. Two Bald Eagles observed in trees opposite bank at Sarah Island Lt. 504.5. No nest was found.  
MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 12:00 RIVER MILE: 499.0

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

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 12  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

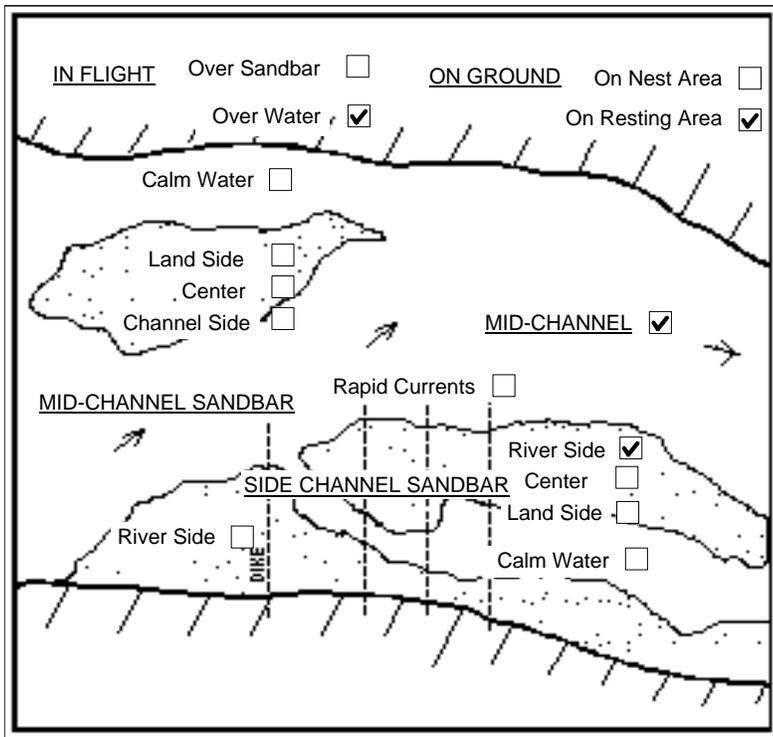
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Attached, sand bar above last dike. Eleven resting at waterline, 1 fishing above upstream dike. No reproductive behavior noted.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 13:10 RIVER MILE: 491.0

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

WHERE SITED: Latitude: 32.8417  
Longitude: 91.1278

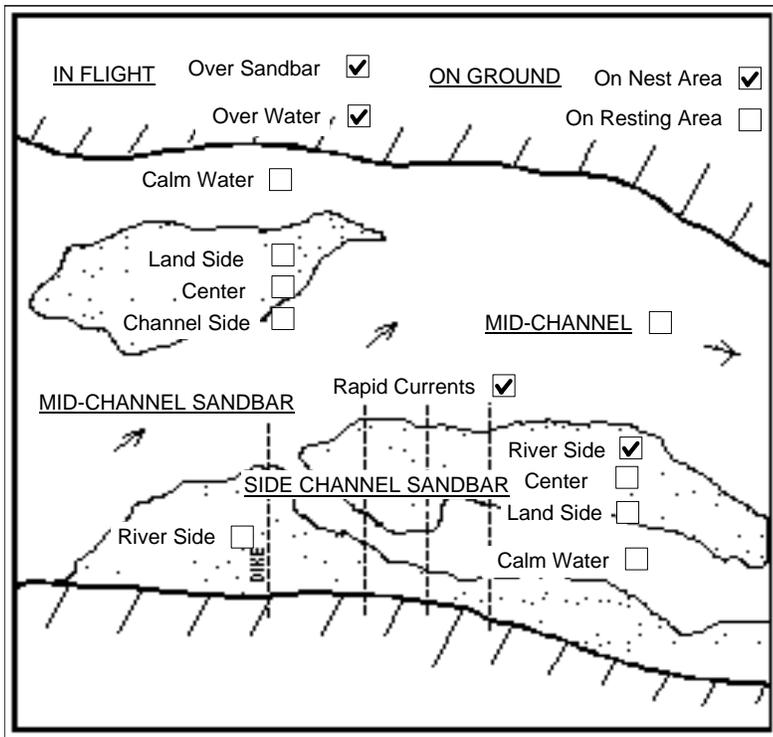
Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:  
Adults: 56  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 3  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Small Willows  
Distance: 150 Feet

FIELD CONDITION:  
Temperature: 86 °F  
Rain: No  
Wind: E 5 mph  
% Cloud: 40



OTHER NOTES:

Left Bank. Very long, clean, extended sand bar upstream from Stack Island. Only 3 nests observed with eggs. Coyote tracks and many empty scrapes = possible predation. Tiger beetles emerging in abundance.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Greenville = 24.0 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 13:26 RIVER MILE: 487.5

LOCALITY: Issaquena MS COUNTY/Parish STATE SITE NAME: Ben Lommond Dikes Upper

WHERE SITED: Latitude: 32.8068  
Longitude: 91.1423

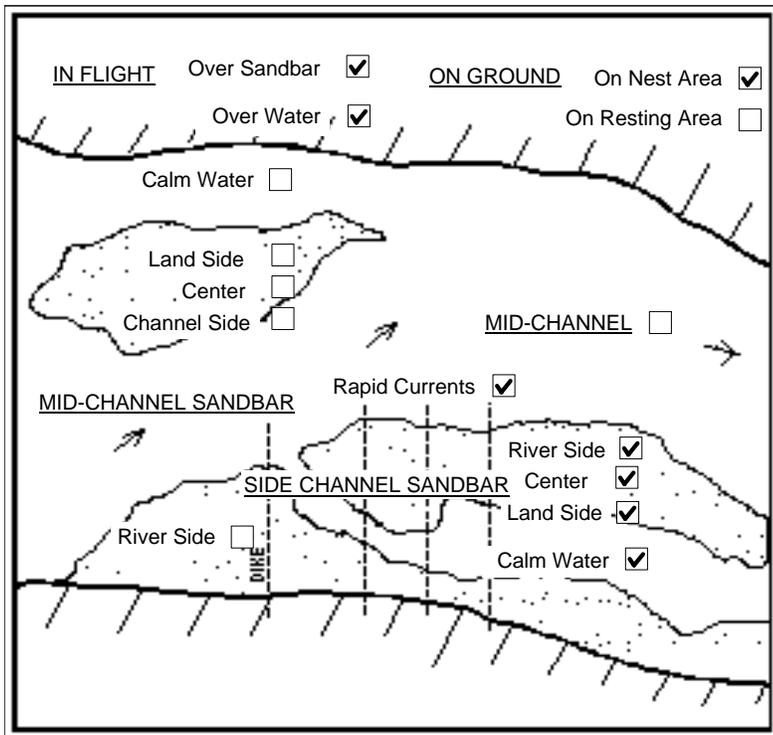
Approximate Distance to Water: 80 Feet

NUMBERS SIGHTED:  
Adults: 162  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 23  
Chicks: Yes

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Shrubby Willows  
Distance: 50 Feet

FIELD CONDITION:  
Temperature: 88 °F  
Rain: No  
Wind: E 5 mph  
% Cloud: 40



OTHER NOTES:

Left Bank. Very concentrated colony on small, convoluted sand bar (700 ft. long by 300 ft. wide) with Willows averaging 12 feet in height. Most nests on back side of bar amongst sparse debris wrack lines. Chicks up to 1 week old. Adults fishing both sides, one against opposite bank revetment. Great Blue Heron tracks and 3 Mississippi Kites circling above but too high to induce mobbing. Two DNA samples collected. MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 13:57 RIVER MILE: 485.5

LOCALITY: Issaquena MS SITE NAME: Ben Lommond Dikes Lower  
County/Parish State

WHERE SITED: Latitude: 32.775  
Longitude: 91.1542

Approximate Distance to Water: 700 Feet

**NUMBERS SIGHTED:**

Adults: 90  
Juveniles: \_\_\_\_\_  
Eggs: 1,2  
Nests: 30  
Chicks: No

**SUBSTRATE:**

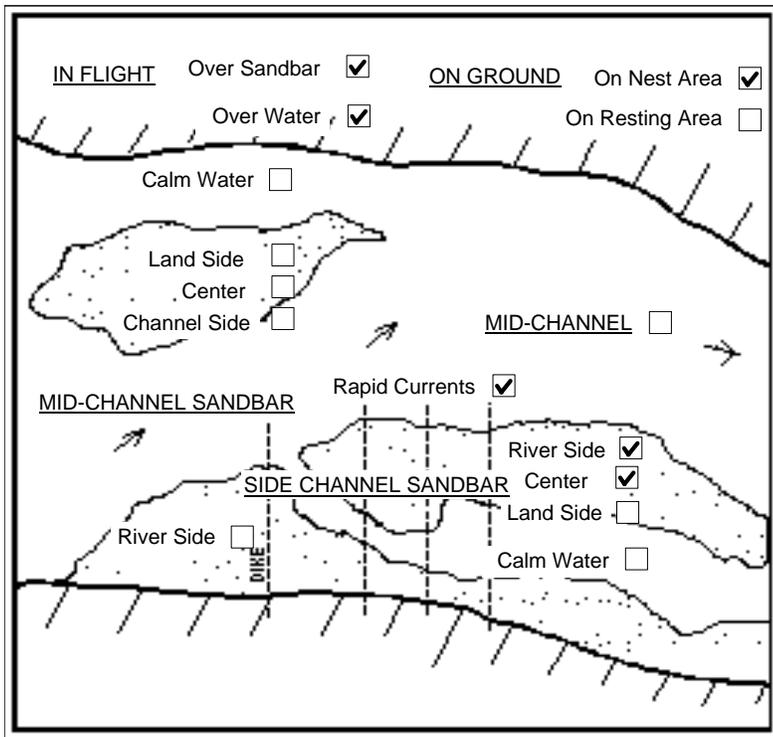
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 88 °F  
Rain: No  
Wind: E 5-10 mph  
% Cloud: 60



**OTHER NOTES:**

Left Bank. High, flat, straight, attached bar of clean, solid sand at lower end of Ben Lomond Dikes. Eight nests with eggs, colony about 1/2 mile in length but 30 setting terns. Coyote tracks from scrape to scrape.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 14:10 RIVER MILE: 483.0

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

WHERE SITED: Latitude: 32.7597  
Longitude: 91.1411

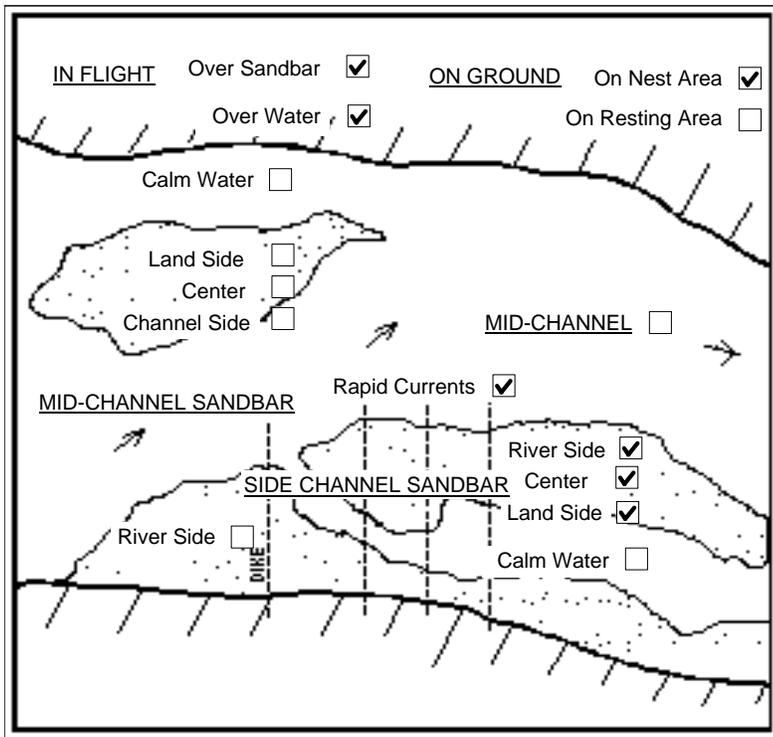
Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:  
Adults: 29  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,4  
Nests: 2  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 88 °F  
Rain: No  
Wind: E 5-10 mph  
% Cloud: 60



OTHER NOTES:

Left Bank. Very small, isolated, low sand bar above Y shaped dike. No tracks or disturbance.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 14:25 RIVER MILE: 481.6

LOCALITY: Issaquena MS SITE NAME: Ajax Bar Dikes Lower  
County/Parish State

WHERE SITED: Latitude: 32.7375  
Longitude: 91.1192

Approximate Distance to Water: 200 Feet

**NUMBERS SIGHTED:**

Adults: 40  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 10  
Chicks: Yes

**SUBSTRATE:**

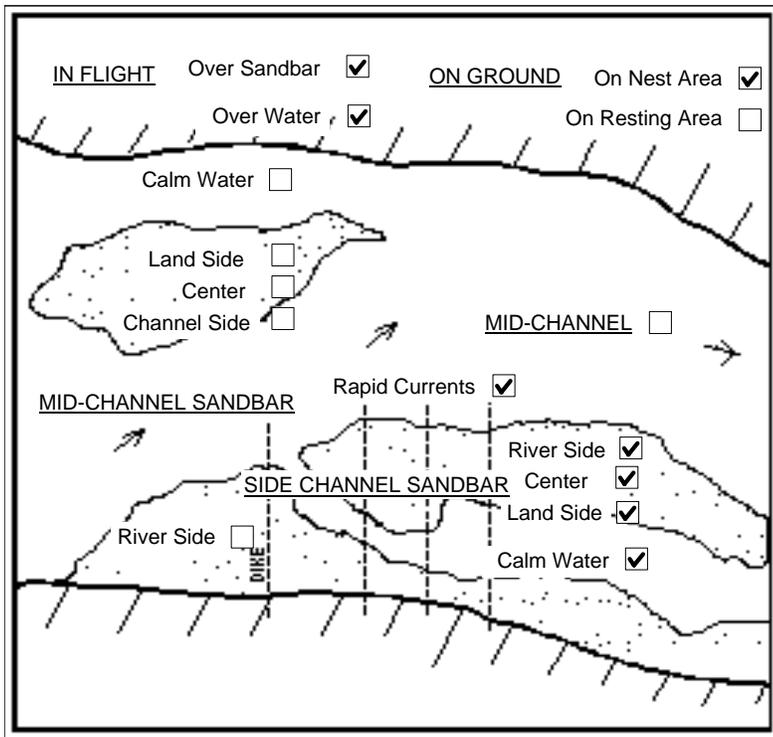
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Grass/Sedges  
Distance: 150 Feet

**FIELD CONDITION:**

Temperature: 88 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 60



**OTHER NOTES:**

Left Bank. Small, unattached sand bar below Y shaped dike. Nests on high back side of bar, chute side.  
Reproductive behavior all sides. Chicks up to 1 week old utilizing vegetation for shade. Coyote tracks  
noted at every scrape.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2006 TIME OF DAY: 14:37 RIVER MILE: 476.6

LOCALITY: East Carroll LA SITE NAME: Point Lookout Dike  
County/Parish State

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 6  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

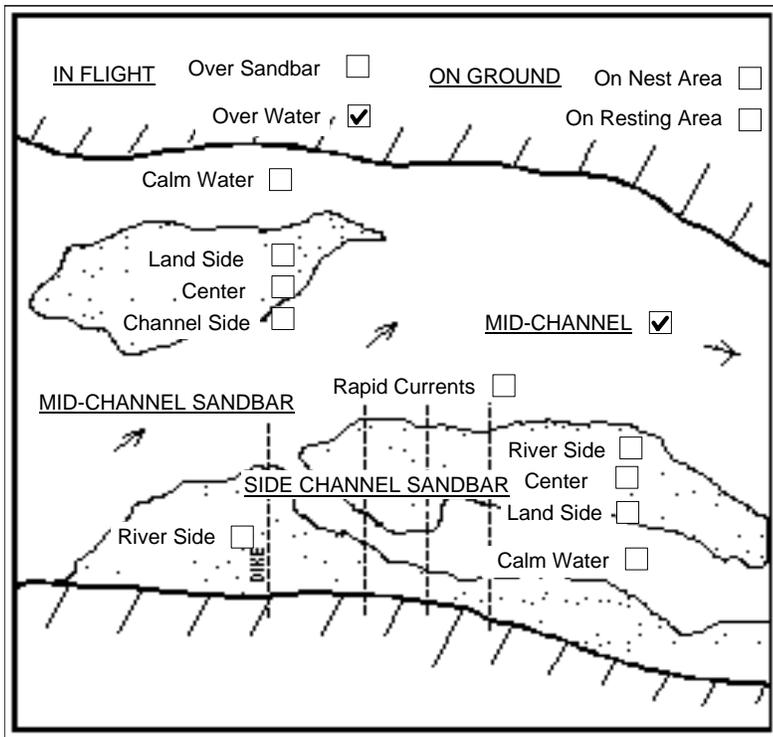
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 88 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 60



**OTHER NOTES:**

Six Terns flying in transit mid-channel.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2006 TIME OF DAY: 14:55 RIVER MILE: 470.5

LOCALITY: Issaquena MS SITE NAME: Arcadia Point Dikes  
County/Parish State

WHERE SITED: Latitude: 32.6594  
Longitude: 91.1322

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 13  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

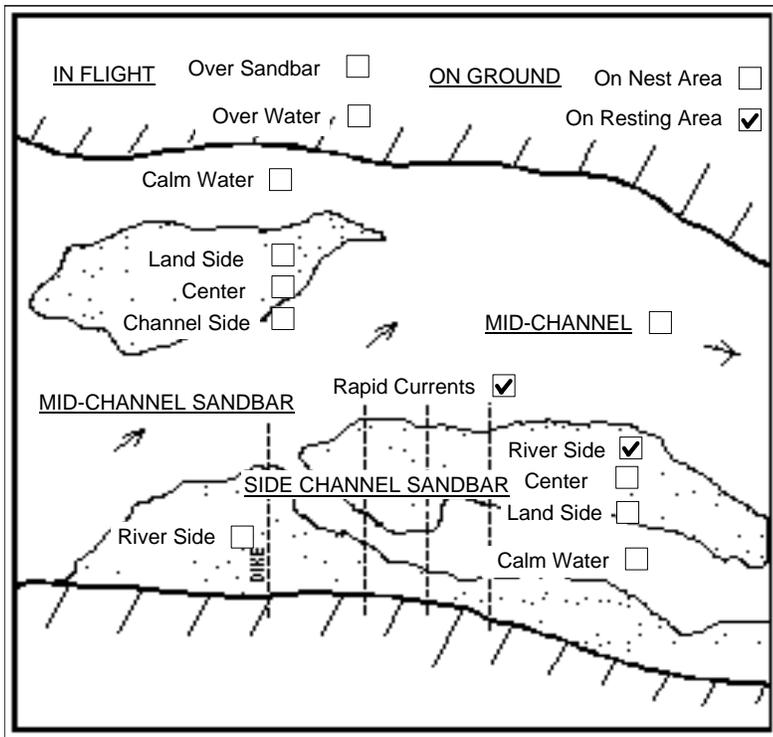
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 89 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 60



**OTHER NOTES:**

Left Bank. Small, attached sand bar with 13 adults resting, along with crows, at the waterline.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 15:30 RIVER MILE: 460.4

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: 250  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 100  
Chicks: No

**SUBSTRATE:**

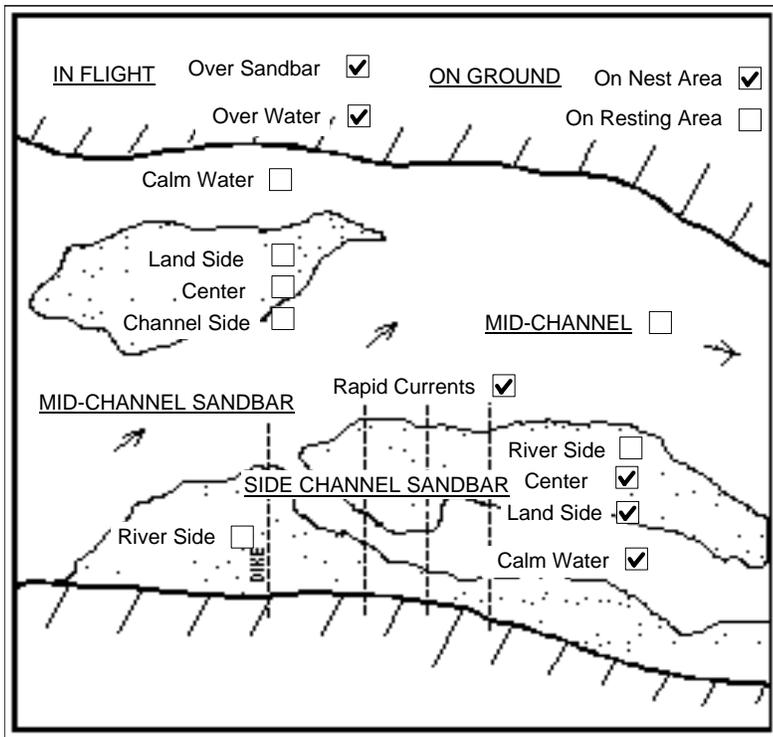
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 90 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 60



**OTHER NOTES:**

Right Bank. Large, long, low, flat, sand bar with colony about 1/4 mile in length and 700 ft. wide. Nests abundant (100), closely spaced and along ripple lines. No signs of disturbance or tracks other than geese. Two White Pelicans at upper end.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 15:45 RIVER MILE: 456.0

LOCALITY: Warren MS SITE NAME: Milliken Bend  
County/Parish State

WHERE SITED: Latitude: 32.4742  
Longitude: 91.1042

Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:

Adults: 67  
Juveniles: \_\_\_\_\_  
Eggs: 2,3  
Nests: 40  
Chicks: No

SUBSTRATE:

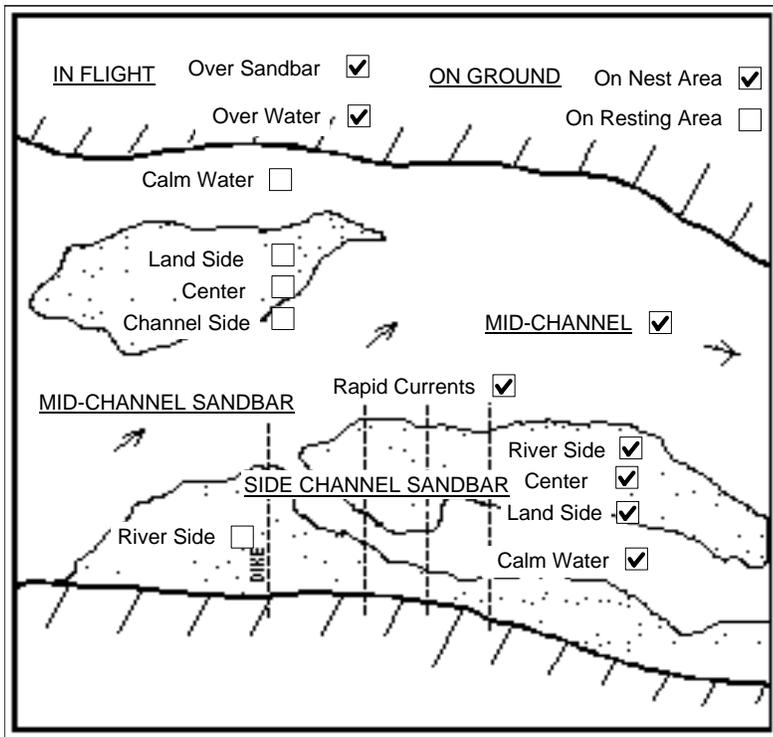
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 500 Feet

FIELD CONDITION:

Temperature: 90 °F  
Rain: No  
Wind: E 10 mph  
% Cloud: 70



OTHER NOTES:

Left Bank. Small, unattached, low, flat sand bar with gravel patches. Nests closely spaced at high center line of bar. No tracks or other disturbance.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/29/2005 TIME OF DAY: 16:30 RIVER MILE: 442.5

LOCALITY: Warren MS SITE NAME: Brown's Point  
County/Parish State

WHERE SITED: Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

Approximate Distance to Water: \_\_\_\_\_ Feet

**NUMBERS SIGHTED:**

Adults: 2  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

**SUBSTRATE:**

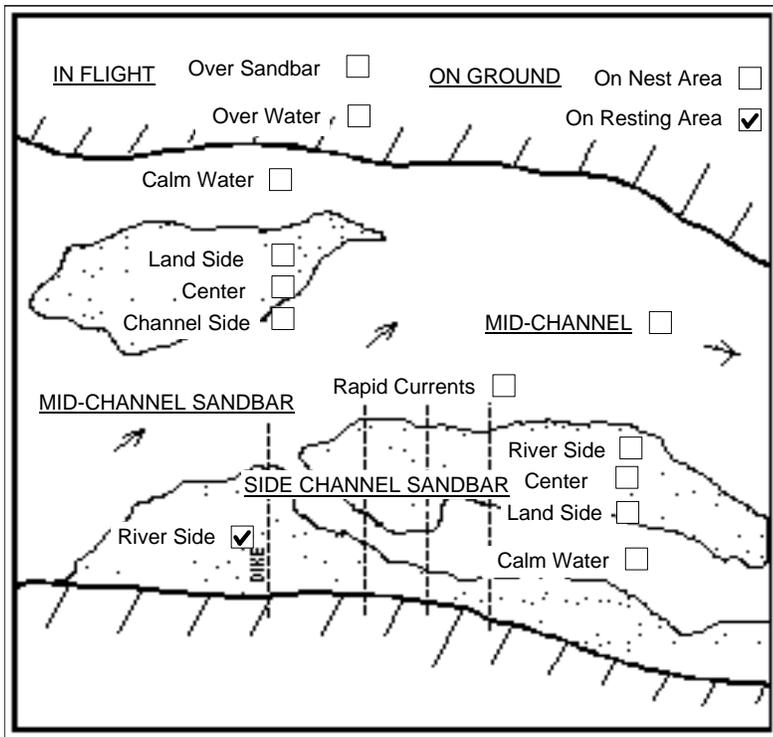
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 90 °F  
Rain: No  
Wind: SE 10 mph  
% Cloud: 30



**OTHER NOTES:**

Left Bank. Small, attached bar. Two resting only.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, Marcy

RIVER GAGE READING: Vicksburg = 18.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 9:36 RIVER MILE: 429.5

LOCALITY: Warren MS SITE NAME: Below Racetrack Dikes  
County/Parish State

WHERE SITED: Latitude: 32.2389  
Longitude: 90.9694

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 225  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 40  
Chicks: No

SUBSTRATE:

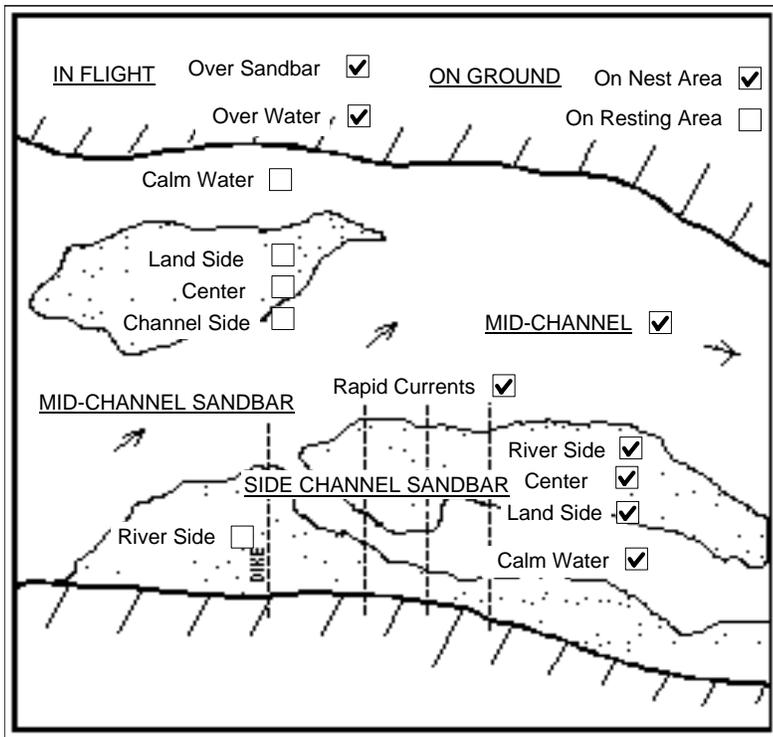
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



OTHER NOTES:

Left Bank. Low series of flat, unattached, incised sand bars. Could not land because of shallow, swift currents. Drift count. Colony 1/2 mile long by 500 ft. wide. Terns observed setting on 40 nests and courting at the waterline, fishing both sides. Six Terns observed fishing opposite bank. No disturbance noted. Several hundred swallows noted.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Vicksburg = 17.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 10:16 RIVER MILE: 419.0

LOCALITY: Warren MS SITE NAME: Newton Bend Dikes  
County/Parish State

WHERE SITED: Latitude: 32.1367  
Longitude: 91.0100

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 90  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 20  
Chicks: No

SUBSTRATE:

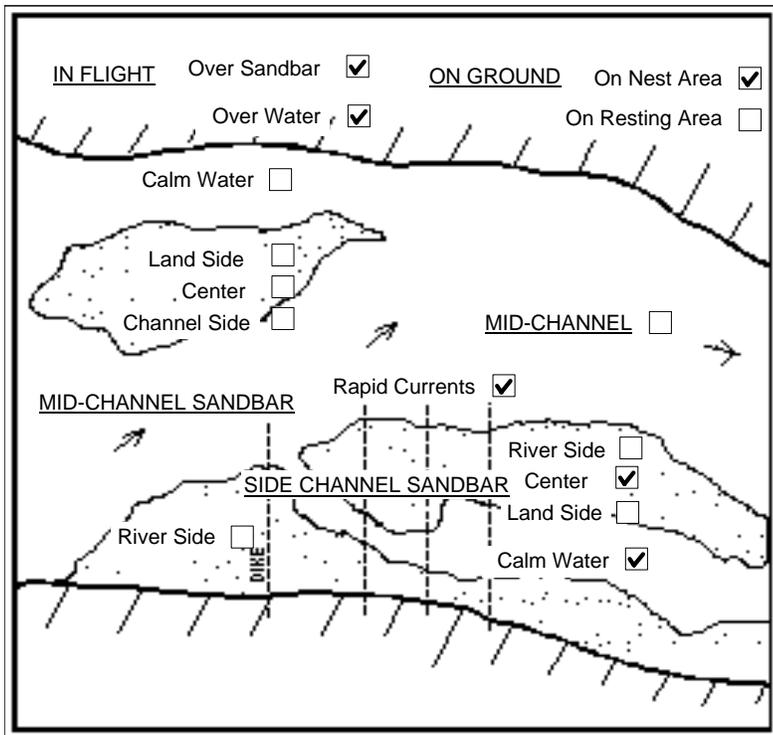
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 300 Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



OTHER NOTES:

Right Bank. Low, flat, small (1000 by 500 ft.) unattached sand and mud bar. Twenty Terns setting on scrapes, 19 feeding in back chute and 3 fishing opposite bank. No tracks or disturbance noted.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Vicksburg = 17.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 10:30 RIVER MILE: 413.6

LOCALITY: Tensas LA SITE NAME: Togo Island Dikes  
County/Parish State

WHERE SITED: Latitude: 32.1072  
Longitude: 91.0997

Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:

Adults: 28  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:

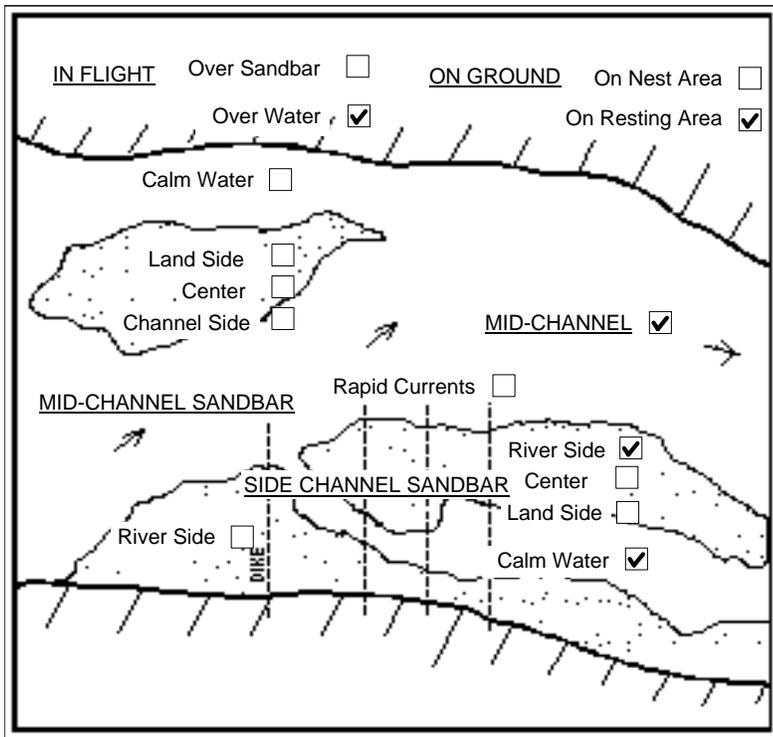
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:

Temperature: 86 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



OTHER NOTES:

Left Bank. Unattached, low, flat sand bar barely emergent (800 x 150 ft.). Possible future colony site if water level continues to fall. Sixteen resting at waterline, 11 fishing opposite bank in mouth of chute, and one on upstream dike. No tracks or apparent disturbance. Two Great Blue Herons, 1 Great White Egret.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Vicksburg = 17.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 10:44 RIVER MILE: 409.5

LOCALITY: Claiborne MS COUNTY/Parish STATE SITE NAME: Yucatan Dikes

WHERE SITED: Latitude: 32.0589  
Longitude: 91.0628

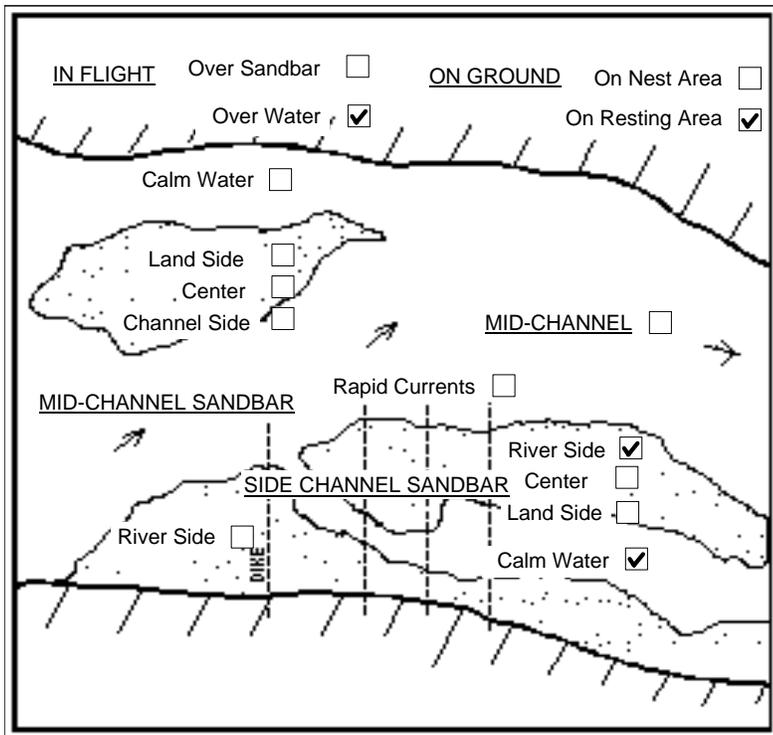
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 13  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: Willows  
Distance: 500 Feet

FIELD CONDITION:  
Temperature: 87 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



OTHER NOTES:

Right Bank. Upstream attached point of Middle Ground Island. Patches of gravel and courting behavior, but no eggs or mobbing of observers.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Vicksburg = 17.6  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 10:57 RIVER MILE: 402.0

LOCALITY: Tensas LA SITE NAME: Coffee Point Dikes  
County/Parish State

WHERE SITED: Latitude: 31.9900  
Longitude: 91.1192

Approximate Distance to Water: 50 Feet

**NUMBERS SIGHTED:**

Adults: 16  
Juveniles: \_\_\_\_\_  
Eggs: 2  
Nests: 2  
Chicks: No

**SUBSTRATE:**

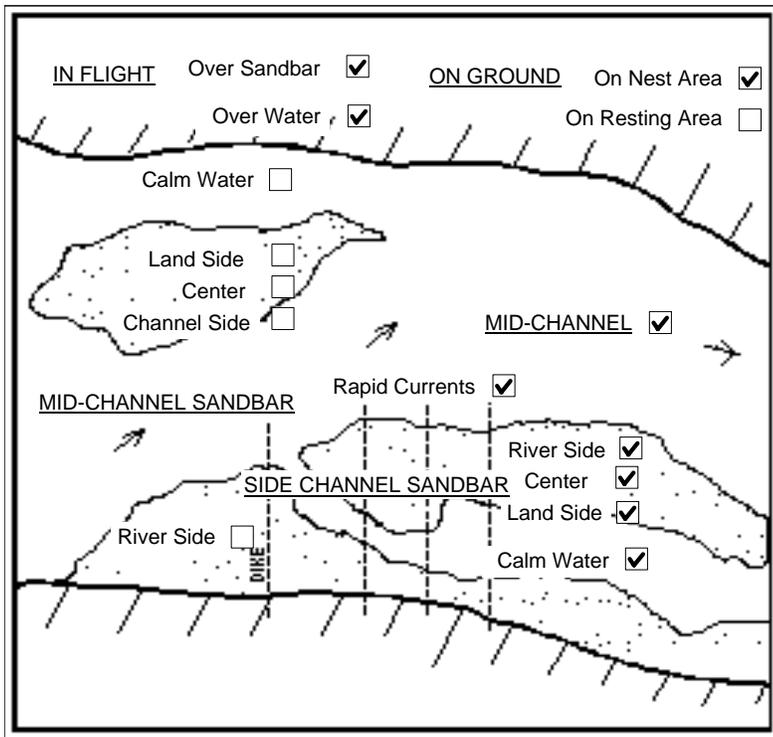
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

**FIELD CONDITION:**

Temperature: 89 °F  
Rain: No  
Wind: Calm  
% Cloud: 0



**OTHER NOTES:**

Right Bank. Very low, small (300 x 150 ft.), recently emerged bar with mud and sparse sedges. Two nests only, with 2 eggs each. Courtship behavior and fishing all sides, but no mobbing. No tracks other than Great Blue Heron

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Vicksburg = 17.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 11:25 RIVER MILE: 393.0

LOCALITY: Tensas LA SITE NAME: Below Bondurant Towhead Dikes  
County/Parish State

WHERE SITED: Latitude: 31.8978  
Longitude: 91.2117

Approximate Distance to Water: 400 Feet

NUMBERS SIGHTED:

Adults: 21  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 5  
Chicks: No

SUBSTRATE:

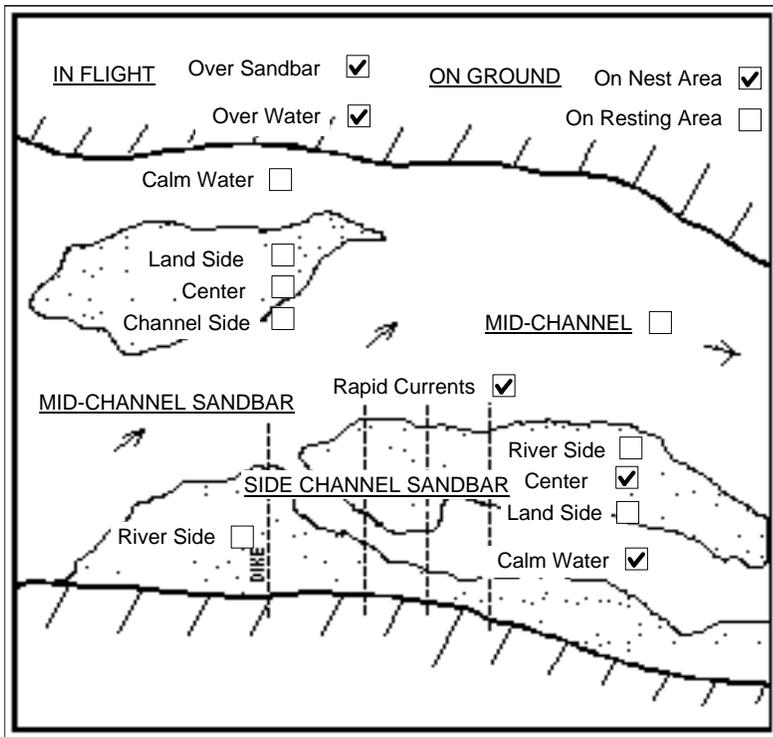
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 40



OTHER NOTES:

Right Bank. Low, flat, gently sloping, 1/4 mile long, sand bar. Terns breasting and fishing both sides. No tracks observed.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Natchez = 25.5 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 11:55 RIVER MILE: 383.2

LOCALITY: Jefferson MS SITE NAME: Below Spithead Towhead Dikes  
County/Parish State

WHERE SITED: Latitude: 31.8306  
Longitude: 91.3467

Approximate Distance to Water: 50 Feet

**NUMBERS SIGHTED:**

Adults: 187  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 30  
Chicks: No

**SUBSTRATE:**

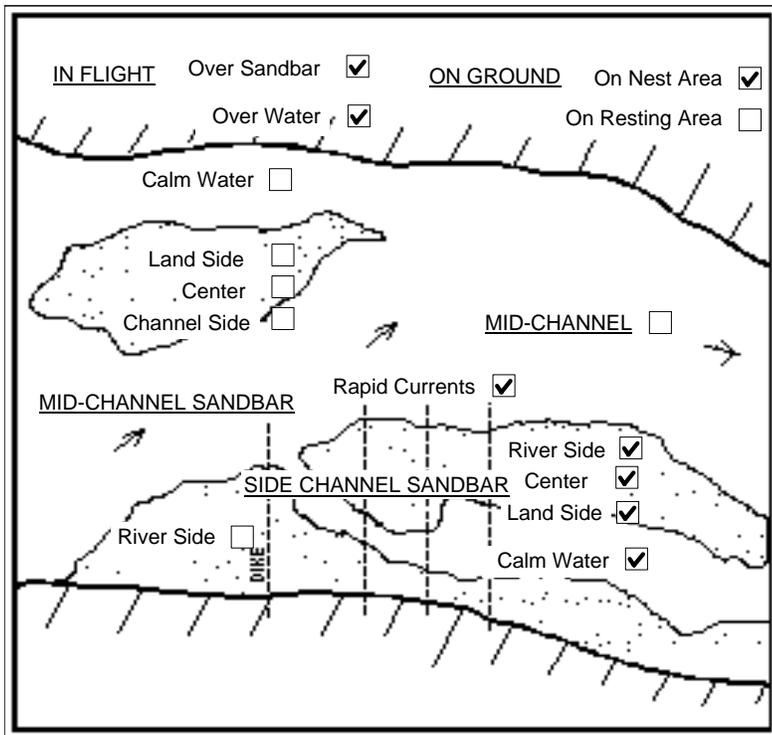
Sand:   
Gravel:   
Debris:

**VEGETATION:**

Type: Willows  
Distance: 1000 Feet

**FIELD CONDITION:**

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 40



**OTHER NOTES:**

Left Bank. Huge, long, high, extended, unattached, sand bar with patches of mud. Most nests widely dispersed along debris wrack lines up to 1/2 mile long at bar's high center. Coyote tracks and 5 Mississippi Kites circling above colony.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Natchez = 25.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 6/30/2005 TIME OF DAY: 12:33 RIVER MILE: 378.0

LOCALITY: Tensas LA SITE NAME: Water Proof Dikes  
County/Parish State

WHERE SITED: Latitude: 31.7604  
Longitude: 91.3708

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 130  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 7  
Chicks: No

SUBSTRATE:

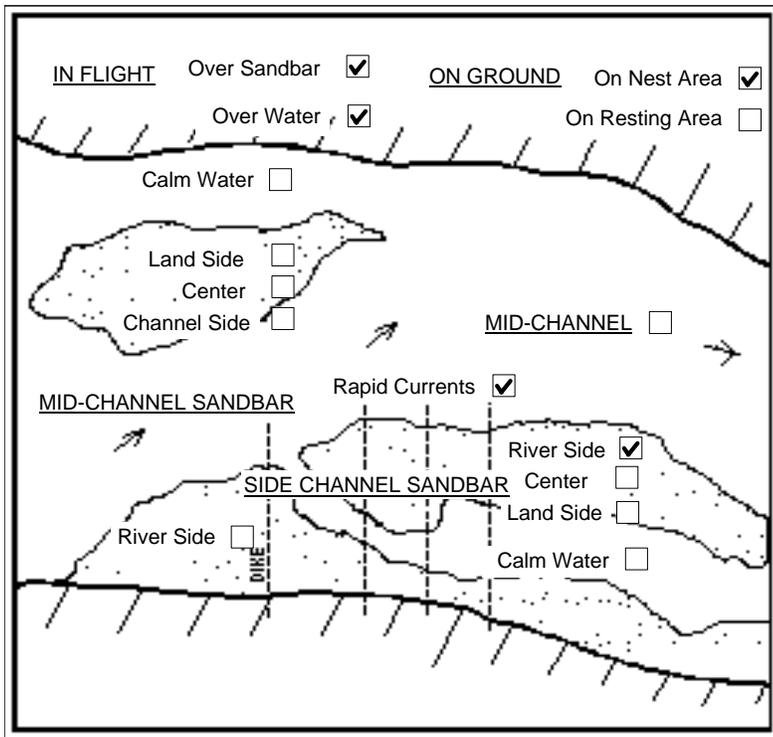
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Grass  
Distance: 10 Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: Calm  
% Cloud: 40



OTHER NOTES:

Right Bank. Attached sand bar with most Terns resting at water line, 7 setting inland along weak wrack lines and grasses. No disturbance noted.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin

RIVER GAGE READING: Natchez = 25.5 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 7:31 RIVER MILE: 357.8

LOCALITY: Adams MS SITE NAME: Carthage Point Dikes  
County/Parish State

WHERE SITED: Latitude: 31.5197  
Longitude: 91.4103

Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:

Adults: 75  
Juveniles: Yes  
Eggs: 1  
Nests: 1  
Chicks: Yes

SUBSTRATE:

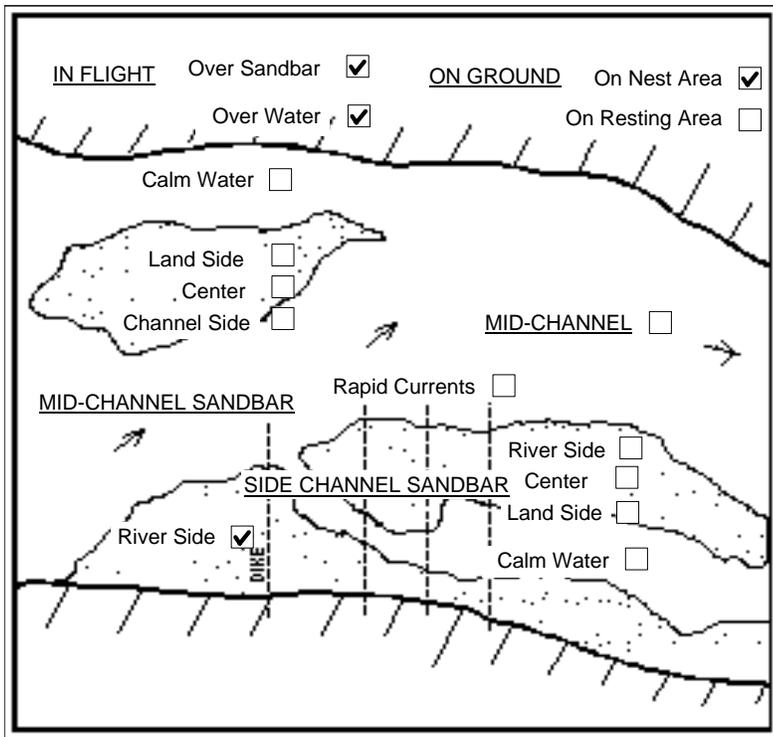
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows/Cottonwoods  
Distance: 200 Feet

FIELD CONDITION:

Temperature: 80 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: <10



OTHER NOTES:

Left Bank. Head of Island, attached gravel bar with some sand, stand of hardwoods nearby. Colony 500 ft. by 1200 ft. in width and length. Truck tracks in gravel with many nesting along track lines. Chicks 1 week and older, some fully fledged. Second and last colony where juveniles are observed. ATV, coyote, and deer tracks.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Thomas, Davin, et al.

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 8:10 RIVER MILE: 349.0

LOCALITY: Adams MS SITE NAME: Opposite Warnicott Landing Dikes  
County/Parish State

WHERE SITED: Latitude: 31.4208  
Longitude: 91.4950

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 554  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 100  
Chicks: Yes

SUBSTRATE:

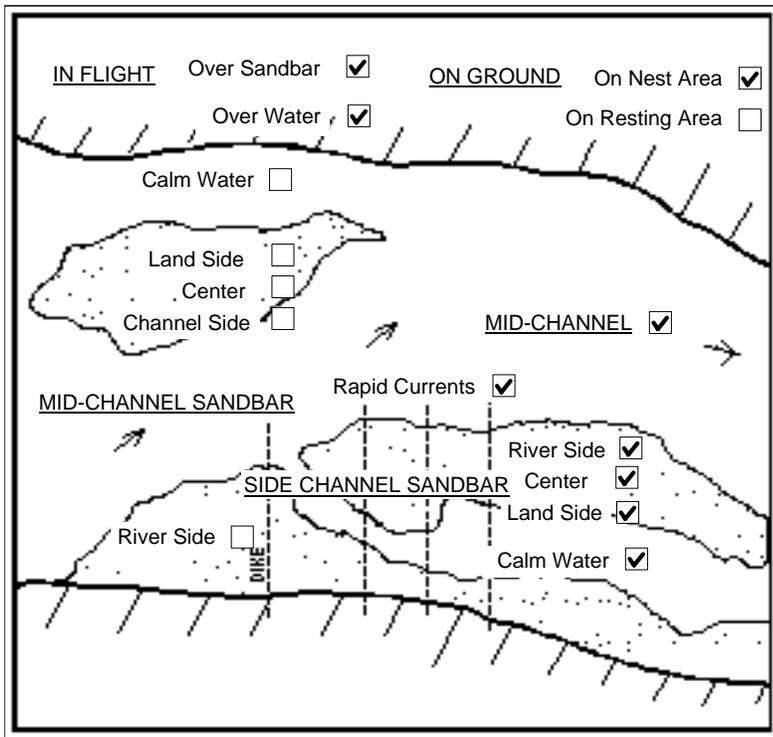
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Grass/herbs  
Distance: 50 Feet

FIELD CONDITION:

Temperature: 82 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 10



OTHER NOTES:

Left Bank. Large, unattached bar of sand and mud at head of Island with back chute. Nests (43 with eggs) in colony about 1 mile long by 1/3 mile wide with nests widely dispersed all across bar, but with chicks concentrated on chute side. Fishing opposite bank and back chute. One adult Tern and 2 chick mortalities collected for DNA. Goose tracks. Ten Canada Geese, 14 White Pelicans, Crows, 1 Snowy Egret, 1 Great Blue Heron in vicinity. MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 8:55 RIVER MILE: 345.0

LOCALITY: Concordia LA SITE NAME: Esperance Point  
County/Parish State

WHERE SITED: Latitude: 31.3580  
Longitude: 91.4848

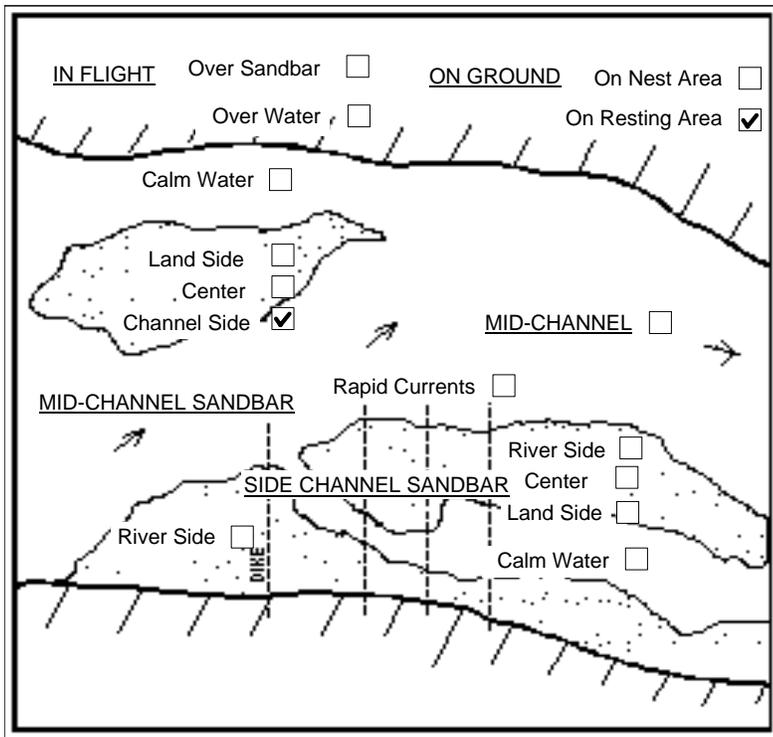
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 2  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 82 °F  
Rain: No  
Wind: S 5 mph  
% Cloud: 10



**OTHER NOTES:**

Right Bank. Very small, just emerged series of sand bars (300 yards long by 100 yards wide in total length). All Terns resting at waterline. No nesting behavior or signs of disturbance.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 9:16 RIVER MILE: 335.6

LOCALITY: Adams MS SITE NAME: Dead Man's Bend  
County/Parish State

WHERE SITED: Latitude: 31.2528 ?  
Longitude: 91.5653

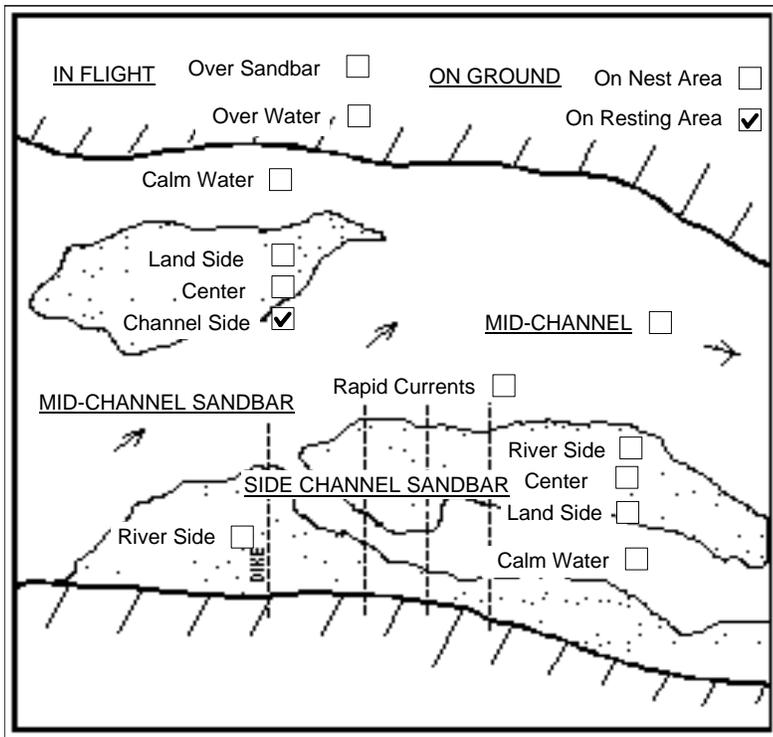
Approximate Distance to Water: \_\_\_\_\_ Feet

NUMBERS SIGHTED:  
Adults: 5  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 0  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 83 °F  
Rain: No  
Wind: Calm  
% Cloud: 10



**OTHER NOTES:**

Right Bank. Medium size, 1/2 mile x 800 ft. wide, recently emergent sand and mud bar with 5 Terns resting only. One Turkey Vulture, 3 Great Blue Herons, 1 Crow. Latitude GPS is questionable according to chart lat/long coordinates.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 9:32 RIVER MILE: 329.0

LOCALITY: Adams MS SITE NAME: Jackson Point  
County/Parish State

WHERE SITED: Latitude: 31.2411  
Longitude: 91.6475

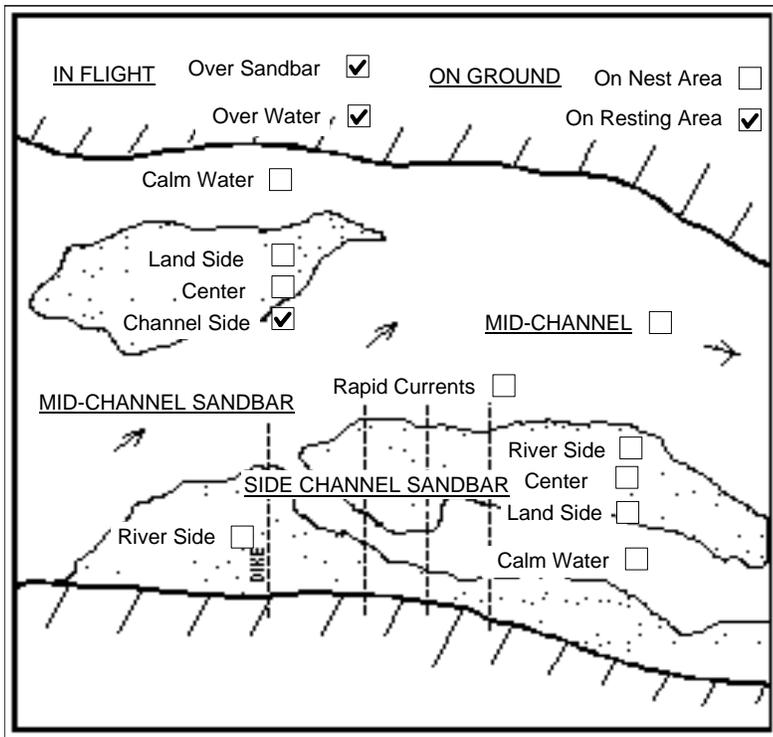
Approximate Distance to Water: \_\_\_\_\_ Feet

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: NW 5 mph  
% Cloud: 40



**OTHER NOTES:**

Left Bank. Mid-channel, isolated point bar of clean, solid sand, 3 ft. vertical height, 150 ft. by 400 ft..  
Appears it might be a nest colony soon with much courting activity, but no other reproductive indicators.  
No tracks or other disturbance factors visible.

MS side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

**FIELD SIGHTING  
DATA SHEET**

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 9:50 RIVER MILE: 322.0

LOCALITY: Concordia LA SITE NAME: Homochito Cutoff  
County/Parish State

WHERE SITED: Latitude: 31.1742  
Longitude: 91.5947

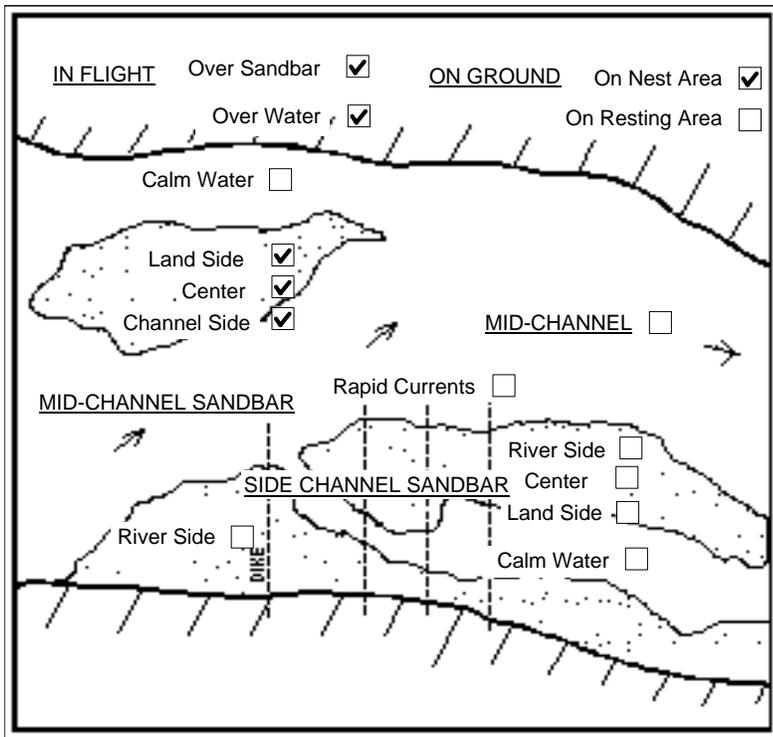
Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:  
Adults: 32  
Juveniles: \_\_\_\_\_  
Eggs: \_\_\_\_\_  
Nests: 2  
Chicks: No

SUBSTRATE:  
Sand:   
Gravel:   
Debris:

VEGETATION:  
Type: \_\_\_\_\_  
Distance: \_\_\_\_\_ Feet

FIELD CONDITION:  
Temperature: 85 °F  
Rain: No  
Wind: NW 5 mph  
% Cloud: 20



**OTHER NOTES:**

Right Bank. Small, unattached, mid channel sand bar, low, flat (600ft. by 200ft.). Two setting at the center on nests, the rest at waterline. Courting behavior. No tracks. Six Anhinga flying mid-channel, 3 White Pelicans downstream, 1 Great Blue Heron, 3 Great Egrets, 4 Snowy Egrets upstream on large island.

LA side

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 10:30 RIVER MILE: 305.0

LOCALITY: West Feliciano LA SITE NAME: Shreves Bar  
County/Parish State

WHERE SITED: Latitude: 30.9956  
Longitude: 91.6447

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 49  
Juveniles: \_\_\_\_\_  
Eggs: 1  
Nests: 4  
Chicks: No

SUBSTRATE:

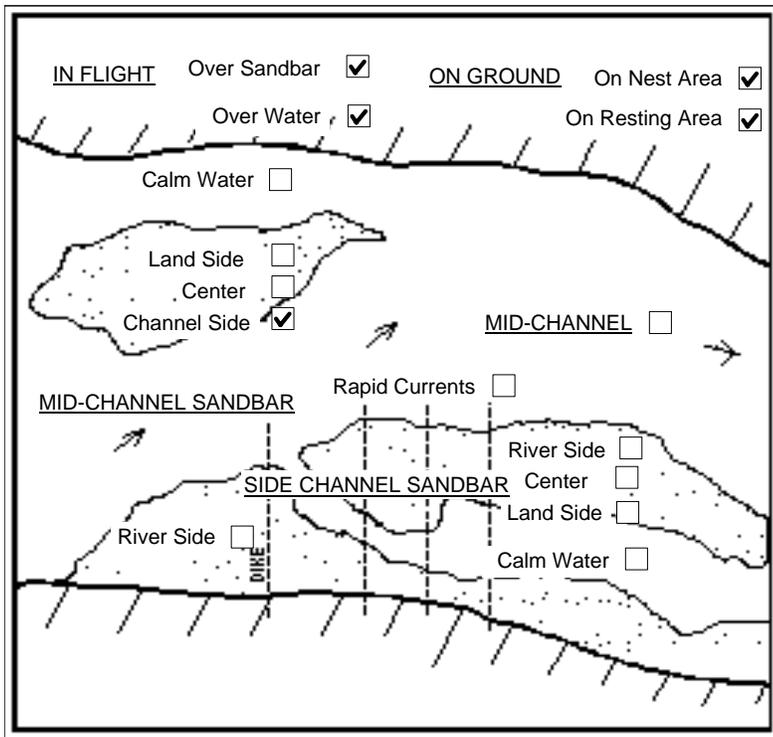
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Grasses  
Distance: 400 Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: NW 10 mph  
% Cloud: 50



OTHER NOTES:

Left Bank. Attached, upstream point of large island. Low, flat, sand. Most birds resting at waterline. Four tending nests with 1 egg. Most scrapes empty along weak wrack lines. No signs of disturbance or tracks. One White Ibis.

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)

FIELD SIGHTING  
DATA SHEET

FLY  BOAT

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

DATE: 7/1/2005 TIME OF DAY: 11:02 RIVER MILE: 300.5

LOCALITY: West Feliciano LA SITE NAME: Hog Point Dikes  
County/Parish State

WHERE SITED: Latitude: 30.9347  
Longitude: 91.6450

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 177  
Juveniles: \_\_\_\_\_  
Eggs: 1,2,3  
Nests: 13  
Chicks: Yes

SUBSTRATE:

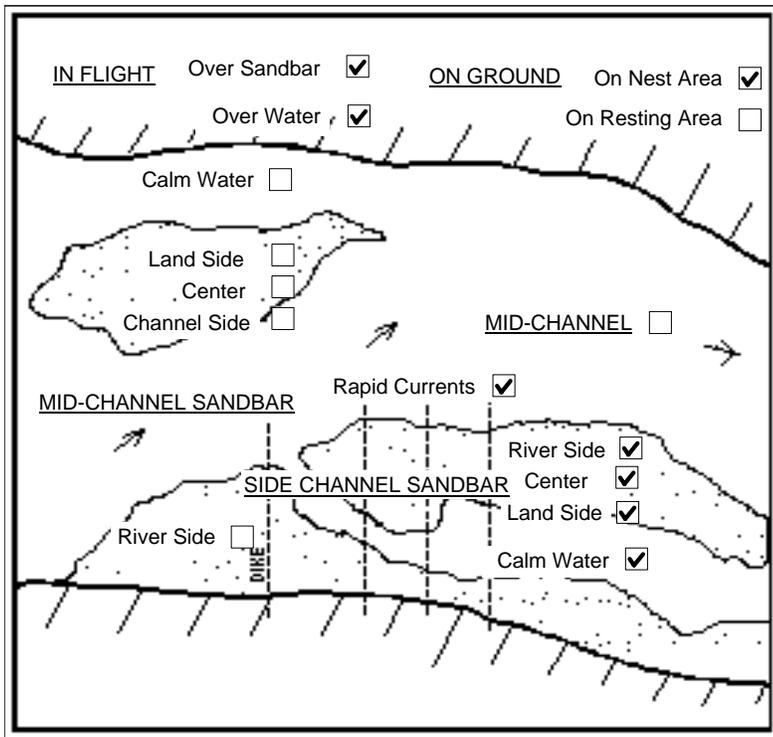
Sand:   
Gravel:   
Debris:

VEGETATION:

Type: Willows  
Distance: 200 Feet

FIELD CONDITION:

Temperature: 85 °F  
Rain: No  
Wind: NW 10 mph  
% Cloud: 50



OTHER NOTES:

Right Bank. Attached, upstream point of wooded island with large, open back chute. Nests all across bar, chicks abundant 1-2 weeks old, utilizing all sides of bar. No tracks observed, 1 Little Blue Heron and 10 Black Vultures upstream from colony.

OBSERVERS: Jones, Rumancik, Fowlkes, Carpenter, Campen, et al

RIVER GAGE READING: Natchez = 24.6 F  
(Gage Location) (Elevation)