

**Sundar, Danielle**

---

**From:** Fox, Lori  
**Sent:** Wednesday, March 11, 2009 4:52 PM  
**To:** Sundar, Danielle  
**Subject:** FW: red knot data

**Follow Up Flag:** Follow up  
**Flag Status:** Blue

**Attachments:** spring2008reknnnc.xls



spring2008reknnnc.xls  
 (21 KB)

For CAHA admin, thanks!

Lori Fox  
 Deputy Director, Denver Operations/Senior Planner

Direct 303-985-6602  
 Main 303-985-6600  
 Mobile 301-461-8772

Fax 303-984-4942

The Louis Berger Group, Inc. | 12596 West Bayaud Street | Suite 201 | Lakewood, CO 80228-2031 | [www.louisberger.com](http://www.louisberger.com) This message, including any attachments hereto, may contain privileged and/or confidential information and is intended solely for the attention and use of the intended addressee(s). If you are not the intended addressee, you may neither use, copy, nor deliver to anyone this message or any of its attachments. In such case, you should immediately destroy this message and its attachments and kindly notify the sender by reply mail. Unless made by a person with actual authority conferred by The Louis Berger Group, Inc., (Berger) the information and statements herein do not constitute a binding commitment or warranty by Berger. Berger assumes no responsibility for any misperceptions, errors or misunderstandings. You are urged to verify any information that is confusing and report any errors/concerns to us in writing.

-----Original Message-----

**From:** Mike\_Murray@nps.gov [mailto:Mike\_Murray@nps.gov]  
**Sent:** Friday, January 23, 2009 6:21 AM  
**To:** Sandra\_Hamilton@nps.gov  
**Cc:** Fox, Lori  
**Subject:** Fw: red knot data

See attached FYI. Non-breeding foraging areas for red knots have come into play during the negotiations. Audubon and WRC are pushing for some non-ORV areas based on the attached 1-time survey data.

Mike Murray  
 Superintendent  
 Cape Hatteras NS/ Wright Brothers NMem/ Ft. Raleigh NHS  
 (w) 252-473-2111, ext. 148  
 (c) 252-216-5520  
 fax 252-473-2595

**CONFIDENTIALITY NOTICE**

This message is intended exclusively for the individual or entity to which it is addressed. This communication may contain information that is proprietary, privileged or

confidential or otherwise legally exempt from disclosure.  
----- Forwarded by Mike Murray/CAHA/NPS on 01/23/2009 08:19 AM -----

"Susan Cameron"  
<camerons@coastalnet.com>  
01/22/2009 03:12 PM  
To  
"Mike Murray"  
<Mike\_Murray@nps.gov>  
cc  
"David Allen"  
<allend@coastalnet.com>  
Subject  
red knot data

Hi Mike,  
I've attached the red knot data from NC flights in late May (northern ½ covered by NCWRC and southern ½ covered by Audubon). As I mentioned, NJDFW - Endangered/Non-game Species Program coordinated flights along the east coast in an effort to identify areas red knots are using and to better understand population numbers and trends. In response to Larry's request for an explanation of how red knots are identified from the air, first it's important to note that we fly extremely low (~150-200 ft.) and we fly two hours either side of high tide so that knots are concentrated and easier to detect. Red knots are identified from the air by size (fairly large shorebird) and color (birds are fairly dark and reddish this time of year and really stand out on the beach). Also, red knots are typically found in dense feeding flocks, again helping with identification. Lastly, we took some photos to confirm id and estimates of flock size. Let me know if you have additional questions.

Best,  
Sue Cameron  
North Carolina Wildlife Resources Commission Waterbird Biologist  
253 White Oak Bluff Rd.  
Stella, NC 28582  
910-325-3602  
camerons@coastalnet.com  
(See attached file: spring2008reknnc.xls)

CAHA  
# 1604

Date	5/21/2008		
Survey time	0800-1130		
Tide	near high and falling		
Area surveyed	NC northern coast: Onslow Beach - Nags Head (covered Bird Shoals and Clam Shoals, but could not cover Browns Island, Cedar Island or Currituck)		
Observers	Sue Cameron and Alex Houston		
	Location	Count	Lat/Long (est. from map - center of larger area)
	Onslow Beach	23	34.537, -77.323
	Browns Island	-	
	Bear Island	0	
	Bogue Banks - Emerald Isle	4	34.649, -77.078
	Bogue Banks - Pine Knoll Shores	20	34.694, -76.809
	Bird Shoals	0	
	CLNS - Shackleford Banks	0	
	CLNS - South Core Banks	105	34.747, -76.422
	CLNS - Middle Core Banks	50	34.866, -76.301
	CLNS - North Core Banks (south end)	19	34.892, -76.263
	CLNS - North Core Banks (north end)	243	35.038, -76.076
	Cedar Island	-	
	CHNS - Ocracoke	194	35.135, -75.896
	CHNS - Hatteras Isl. (south of South Beach)	90	35.219, -75.661
	Clam Shoals	0	
	CHNS - Hatteras Isl. (South Beach)	222	35.232, -75.552
	Pea Island	0	
	CHNS - Bodie Island to Nags Head	0	
	Total	970	
			89 along the southern half, 25 along the middle and 80 along the northern half
			could not survey b/c flight restrictions
			ground count by Cmp Lejeune biologists could not survey b/c flight restrictions 23 during ground count later that day @ 1430
<b>Red Knot Survey May 20, 2008 - southern coast</b>			
Weather: Sunny and windy, becoming partly cloudy with thunderstorms forming; 75 degrees F, SW wind 15-20 with gusts to 30.			
Tide: High (0840), falling			
Time: 0845 to 1310			
Observer: Walker Golder			
	Location	Flock Size	Latitude
	North end of Wrightsville Beach	24	34.241674
	North end of Wrightsville Beach	12	34.241157
	South end of Figure 8 Island	1	34.244953
	Rich Inlet Shoals	22	34.299567
	Rich Inlet Shoals	35	34.293723
			Longitude
			-77.769732
			-77.77142
			-77.767946
			-77.716578
			-77.71164

Hutaff Island	20	34.313808	-77.695264
Lea Island	14	34.331576	-77.675038
Masonboro Island	14	34.130401	-77.846433
Carolina Beach	0	34.041494	-77.887158
Kure Beach	0	33.997404	-77.905563
Ft. Fisher	0	33.958544	-77.922903
Bald Head Island (east beach)	25	33.881916	-77.954731
Cape Fear to SC Line	0		
Total	167		