

From: [Larry Hardham](#)
To: [Mike Murray](#)
Subject: Fw: red knot data
Date: 01/24/2009 11:30 AM
Attachments: [spring2008reknnc.xls](#)

Mike

Can you find out if the locations shown for Hatteras and Ocracoke on May 21, 2008 were within an open ORV area or were these locations already closed? The locations on Ocracoke may be too vague to determine.

Larry

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

From: [Patrick Field](#)
To: [allend@coastalnet.com](#) ; [bobeakes@aginet.com](#) ; [cahabusinessallies@embarqmail.com](#) ; [camerons@coastalnet.com](#) ; [ccboucher@cox.net](#) ; [Cyndy Holda](#) ; [Darrell Echols@nps.gov](#) ; [davandme@embarqmail.com](#) ; [david_rabon@fws.gov](#) ; [hardhead@embarqmail.com](#) ; [jrylander@defenders.org](#) ; [Karen & Dwight Rettie](#) ; [Mike Murray@nps.gov](#) ; [Ona Ferguson](#) ; [Patrick Field](#) ; [rcmheritage@mac.com](#) ; [rettied@hotmail.com](#) ; [Robert Fisher](#) ; [Sandra Hamilton@nps.gov](#) ; [Thayer Broili@nps.gov](#) ; [wgolder@audubon.org](#)
Sent: Thursday, January 22, 2009 8:01 PM
Subject: FW: red knot data

ROBERT

Please forward also to the Routes and Areas subcommittee.

PAT

----- Forwarded Message

From: <Mike_Murray@nps.gov>
Date: Thu, 22 Jan 2009 15:17:47 -0500
To: CBI Patrick Field <pfield@cbuilding.org>
Subject: Fw: red knot data

Please forward to the subcommittees.

Sent from my BlackBerry Wireless Handheld

From: "Susan Cameron" [camerons@coastalnet.com]
Sent: 01/22/2009 03:12 PM EST
To: Mike Murray
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.)

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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

----- End of Forwarded Message

_____ Information from ESET NOD32 Antivirus, version of virus signature
database 3757 (20090111) _____

The message was checked by ESET NOD32 Antivirus.

<http://www.eset.com>

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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, 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	
Red Knot Survey May 20, 2008 - southern coast		
Weather: Sunny and windy, becoming partly cloudy with thunderstorms forming; 75 degrees		
Tide: High (0840), falling		
Time: 0845 to 1310		
Observer: Walker Golder		

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

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Longitude
-77.769732
-77.77142
-77.767946
-77.716578
-77.71164
-77.695264
-77.675038
-77.846433
-77.887158
-77.905563
-77.922903
-77.954731