

15, Whitewood, Dec. 22, 1996, (CBC); 45, Whitewood, Jan. 5, 1997 (BM, JP); 15, Fort Qu'Appelle, Dec. 19, 1997 (RH, CBC).

### Acknowledgements

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## SPEEDY MIGRATION: SASKATCHEWAN'S FIRST OSPREY SATELLITE TRANSMITTER

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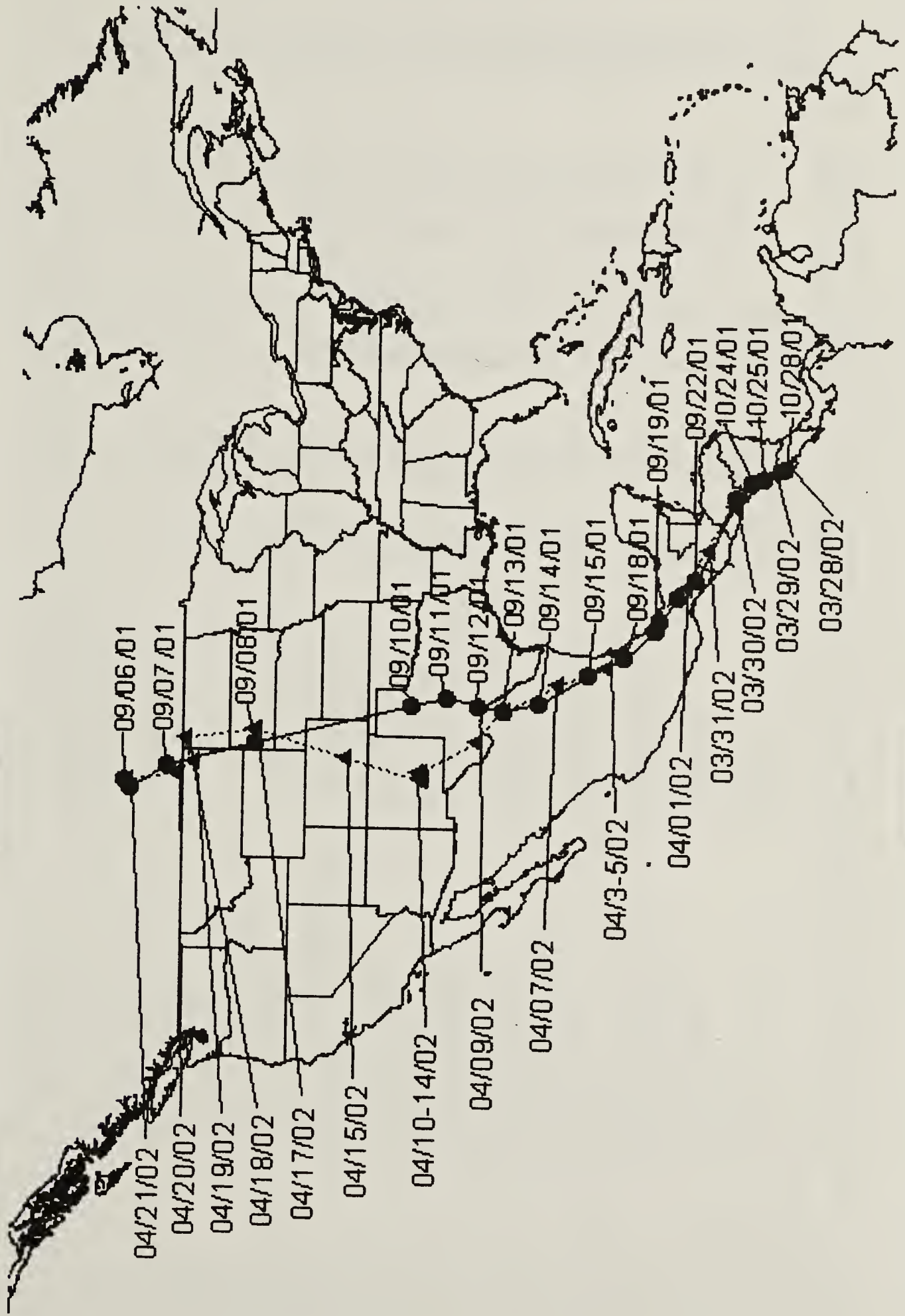
On July 2, 2001, a 35 g solar-assisted satellite transmitter was applied to the back of a 1900 g adult female Osprey, at her nest pole beside the South Saskatchewan River east of Rosthern, SK. The transmitter provided multiple daily latitude and longitude readings through the Argos system (see [www.argosinc.com](http://www.argosinc.com) for more details). The data were analyzed and mapped using ArcView (ESRI Inc. Redland, CA) GIS, and distances were calculated using Grinwich.

The Osprey fed her young on or near her nest until August 10. We presume this was

the date for the second youngster to fledge, for she then began to cruise up and down the river, most commonly in a south-westerly direction from her nest pole. From August 30 through September 6, she perched along the river only 5 km north of Saskatoon, 57 km from her nest platform.

Her first migration flight of 283 km on September 7 took her to near Avonlea, Saskatchewan. On the second day, after a flight of 640 km, she reached Rapid Creek in the Black Hills west of Rapid City, South Dakota. The third and fourth days' flights

Map 1. The Osprey's route from Rosthern SK to Costa Rica, showing the date at each location. Circles: southbound locations; triangles: northbound locations.



**Table 1 – Osprey travels 2001-2002 Saskatchewan to Costa Rica and back**

2001 Date	Locality	Water Body	State	Latitude deg min	Longitude deg min	Distance (km)	
<b>Southward Bound</b>							
Jul 2-Aug 11	13 km e Rosthern	S Sask R	Sask	52 40	106 7	ArcView	
Aug 12-29	S Sask R	S Sask R	Sask	52 var	106 var	Grinwich	
Aug 30-Sep 6	River n Saskatoon	S Sask R	Sask	52 13	106 34	64	
Sep 7	20 km s Avonlea		Sask	49 50	105 9	257	
Sep 8	30 km w Rapid City	Rapid Creek	SD	44 11	103 32	609	
Sep 9 & 10	Matador	Middle Pease R	TX	34 4	101 0 *	1107	
Sep 11	San Angelo	Concho River	TX	31 45	100 36	255	
Sep 12	Comstock	Devils River	TX	29 56	101 6	215	
Sep 13	n Nueva Rosita	Rio la Leona	Coah	28 12	101 19	199	
Sep 14	La Paloma	near unnamed stream	Coah	26 0	100 47	249	
Sep 15 & 16	40 km w Ebano	near unnamed stream	SLP	22 46	98 55 *	392	
Sep 17	40 km w Poza Rica	Rio Pantepec	VC	20 31	97 52	267	
Sep 18	65 km s Veracruz	Rio la Hacienda	VC	18 32	96 10	274	
Sep 19	30 km sw San Andres Tuxtla	Rio San Juan	VC	18 17	95 27	79	
Sep 20	90 km nw Tuxtla Gutierrez	Malpaso Reservoir	VC	17 10	93 58	194	
Sep 22	85 km sse Tuxtla Gutierrez	Rio Hustate	Chiap	16 1	92 47	175	
Sep 23-Oct 22	<b>27 day stop</b>	La Angostura Reserv	Chiap				
Oct 23	40 km n San Lorenzo		Hond	13 26	87 34	619	
Oct 24	70 km e Leon		Nicar	12 25	86 29	159	
Oct 25	50 km s Managua		Nicar	11 44	86 17	80	
Oct 26-Mar28	35 km s Liberia	Tempisque River	Costa	10 22	85 34	169	
						5363	
<b>19 days major travel southward</b>						<b>mean</b>	<b>282</b>
<b>Shortest direct route between end points</b>						<b>5049 km</b>	

**Northward Bound**

Mar 28	35 km s Liberia	Tempisque River	Costa	10	21	85	40	99
Mar 29	San Juan del Sur	Pacific Ocean shore	Nicar	11	11	85	53	99
Mar 30	30 km n St. Miguel	Grande San Migeul R	EISal	13	42	88	4	362
Mar 31	20 km e Neba	Chixoy Negro R	Guat	15	19	90	54	347
Apr 1	20 km w Tuxtla Gutierrez		Chiap	16	43	93	20	297
Apr 3	12 km w Alamo	Rio Pantepec	Mex	20	56	97	48 *	643
Apr 4	12 km nnw Tres Palmas		VC	21	44	98	25	106
Apr 5	12 km n Tres Palmas		VC					5
Apr 7	12 km n Linares	Rio Conchos	Mex	24	58	99	30 *	370
Apr 8	40 km n Nueva Rosita	near Rio la Leona	Mex	28	19	101	16	397
Apr 9	Marathon	Maravillas Creek	Coah	30	7	103	18	265
Apr 10	5 km w Hondo	near Rio Hondo	TX	33	30	105	23	402
Apr 11	40 km w Hondo		NM	33	28	105	45	35
Apr 12	40 km w Hondo		NM	33	26	105	44	2
Apr 13	60 km ne Carrizosa		NM	33	51	105	21	63
Apr 14	10 km se Carrizosa		NM	33	33	105	49	59
Apr 15	30 km n Pueblo	Chico Creek	USA	38	30	104	28	592
Apr 16	40 km ne Rapid City	Cheyenne River	CO	44	17	102	46	686
Apr 17	55 km ne Rapid City	Cheyenne River	SD	44	22	102	41	12
Apr 18	Crosby		SD	48	49	103	18	482
Apr 19	25 km w Medicine Lake	Smoke-Big Muddy Cr	ND	48	22	104	50	138
Apr 20	10 km n Willow Bunch	Willow Bunch Lake	MT	49	31	105	38	126
Apr 21	e of Rosthern	S Sask R	Can	52	41	106	9	343
			Can					5831
								265
								343
								5891
								268
								347

**22 days travel northward mean**  
**17 days major travel northward mean**

Notes An asterisk before the distance column indicates a "two-day" distance. Others are "one-day".  
 All localities in column B can be found in the Rand McNally International Atlas, 1969  
 Names of small rivers are from Guia Rojo por las Carreteras de Mexico, 1998  
 If column C blank, the osprey satellite reading was evidently distant from water

took her 1145 km to Matador, Texas, by September 10, a surprising distance of 1785 km in three days! Shorter trips of 260 km and 208 km, respectively, took her to San Angelo on September 11, and then Comstock, Texas on September 12. Many of the data points were near rivers or reservoirs where presumably she could catch fish.

Flights of 194, 252, 405 (in 2 days), 273, 283, 81, 200, and 180 km took her to the large La Angostura Reservoir southeast of Tuxtla Gutierrez, Chiapas, Mexico. She stayed there for one month. We thought she must be wintering there, since the previous longest stop during fall migration was a 20 day layover by an east coast male Osprey in Cuba who wintered in Brazil.<sup>2</sup> From Chiapas, the Saskatchewan Osprey flew 588 km to Honduras, 162 and 80 km in Nicaragua, and after a 170 km flight arrived on 26 October at the Tempisque River, at the base of the Nicoya Peninsula in Costa Rica. She had spent 19 days in major travel, with an average distance of 287 km per day (282 km by ArcView), but the total elapsed time from near Saskatoon to Costa Rica was 51 days (Table 1). This is similar to the speed of Ospreys tracked from Oregon which by ArcView calculations averaged 296 km/day, and is faster than birds from Minnesota (230 km/day) or New York (214 km/day).<sup>2</sup>

Her route had been a remarkably straight line, slightly east of south, so direct that the shortest distance between the nest pole and her wintering area was 5049 km, only 412 km less than the sum of the individual flights. She remained fishing on the Tempisque River for five months. Her last day there was March 28.

Her first day's northward flight took her 99 km to the Pacific Ocean shore in Nicaragua. A flight of 367 km to El Salvador and another 353 km to Guatemala, was followed by 304 km to Chiapas. She spent the first eight days of April traveling the length of eastern Mexico, then on to Texas,

New Mexico (where she stayed for five days), Colorado, South Dakota (2 days), extreme northwest North Dakota, and northeast Montana. She arrived at the northwest corner of Willow Bunch Lake in Saskatchewan on 20 April, and at her platform on the river 15 km east of Rosthern on April 21, after a final flight of 354 km. She averaged 347 km (343 km by ArcView) in 17 days of major travel on the way north, not counting seven days of presumed rest and feeding, for an elapsed time of 24 days. Southward and northward routes were similar, apart from a westward deviation into New Mexico and Colorado on the way north.

Previous band recoveries of Ospreys from Saskatchewan included three from the Pacific Ocean coast near the equator in Colombia and Ecuador.<sup>1</sup> From this small sample CSH had hypothesized that Saskatchewan birds "leap-frogged" over the Idaho Ospreys whose bands had been recovered in Central America.

Ospreys tracked from the Columbia River in Oregon wintered for the most part in Mexico and as far south as Honduras. Ospreys tracked from Minnesota wintered from Mexico south to Peru including Nicaragua and Panama.<sup>2</sup> Thus it seems probable that Saskatchewan Ospreys share their wintering areas, at least as far north as Costa Rica, with other birds that breed from the Great Lakes westward to the Pacific Ocean.

The satellite radio transmitter provided, for the first time, an accurate record of the distance traveled per day, and the number of rest and feeding stops en route. If the bird lives another year, and the transmitter keeps functioning, we plan to follow this bird's movements for a second year. Previous multi-year studies of 16 Ospreys from the United States, followed for two to four years, indicate that individuals tend to follow a similar route each year and to winter in the same area.

A note on distance measurement The Greenwich program is based on an equatorial radius of 6378.5 km and a polar radius of 6356.9 km. Since the earth is not a perfect sphere (such an assumption would underestimate the length of the equator by 68 km), Greenwich calculations make a correction for the ellipsoid shape of the earth.

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matched, dollar for dollar, the \$3000 raised by Nature Saskatchewan for this \$6000+ project. Without this support we would not have learned the Osprey's remarkable speed in its first week of southward travel. We thank Matthew J. Solensky and Ananda Wiegand for help with data management.

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## EARLY SASKATOON CITY BIRD BANDERS\*

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### Stuart Thompson

A news story, titled "Stuart Thompson, 17, only bird-bander, wants to be game warden and live out-of-doors," appeared in the 27 March 1935 issue of the *Saskatoon Star-Phoenix*. In the article, Ted Schrader, editor of *The Park Bench*, the City Park Collegiate paper, told how Stuart wrote for and received a bird banding permit from the Department of the Interior, Ottawa. Unfortunately, there is no record of his banding activities; probably he banded few, if any, birds. Perhaps his aim was to band Great Horned Owls, for he had a band of that size which he passed on to his more junior friend, Farley Mowat, duly acknowledged in Mowat's 1936 banding schedule for a single fledgling owl.

### Farley McGill Mowat, permit # 00294

In his autobiography, *Born Naked*, Farley tells of applying for a banding permit on May 14, 1935 – two days after his 14<sup>th</sup> birthday.<sup>6</sup> So that he could obtain a permit, his great-uncle, Frank L. Farley of Camrose, Alberta, wrote a letter of support, as did a friend. Mowat admits to writing his age somewhat illegibly in his band permit application, since he was under-age. The front sheet of the file at Patuxent Research Refuge, Laurel, Maryland, is titled "W. Mowat." His 1935 banding schedules, in Mowat's own handwriting, list him as William McGill Mowat. Someone, presumably in the banding office in Ottawa, later crossed out William, and wrote in "Farley." His file in the Ottawa banding office, then in the