ildlife that call Michigan and the Bai T.R.U.T.H. Homeschool Group, Grade 3 (Pat Weber-Rohrer) Ariana Leibold West Branch Kirtland's Warbler Wildlife Festiva warbler.kirtland.edu



Get to know two countries' rarest warbler

he Kirtland's warbler (Dendroica kirtlandii) is our country's rarest warbler. It was one of the first birds to be placed on the Endangered Species List after passage of the Endangered Species Act of 1973. This small warbler, with its gray-blue back and bright yellow breast, nearly became extinct just a few decades ago.

During spring and summer, most Kirtland's warblers nest in just one place – the jack pine forests of northern Michigan. Within the past decade, however, it has expanded its summer breeding range to parts of Wisconsin and Ontario, Canada.

In the fall, the Kirtland's migrates to The Bahamas where it overwinters before returning in early May.

The bird's near extinction came about primarily because of changes in its habitat.

The warbler nests on the ground beneath the lower branches of jack pine that are between five and 20 feet tall. They prefer a special type of sandy soil found in just a few counties in northern Michigan.

When Europeans began to impact the forests in northern Michigan, the nesting habitat of the Kirtland's began to disappear. Prior to modern fire suppression methods, large natural wildfires frequently burned thousands of acres of jack pine forest in



northeastern Lower Michigan, providing natural habitat for the warbler.

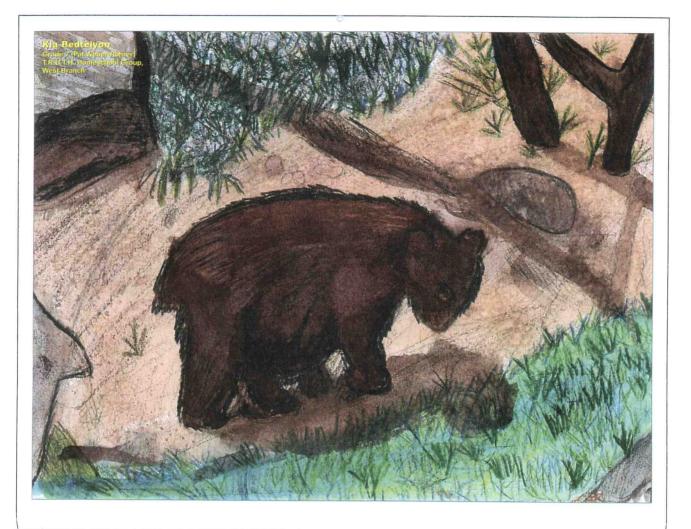
However, modern fire suppression efforts have substantially decreased the frequency and size of wildfires, significantly reducing the amount of nesting habitat produced for this bird. While fire suppression is necessary to protect human life, property and valuable natural resources, it eliminates a natural disturbance factor on which many species of animals, plants and insects depend.

In addition, Kirtland's warbler nests are parasitized by the brownheaded cowbird. The cowbird lays its eggs in the nests of other birds and has expanded its range into Michigan due to the cutting of forests to create farmland. This parasitism greatly reduces the survival of Kirtland's warbler young.

Today, the Kirtland's warbler is on the comeback because of man's intervention. Harvest of jack pine forests by state and federal agencies have restored the habitat of the Kirtland's warbler. A brown-headed cowbird trapping program is also maintained.

At one point the total Kirtland's warbler population numbered in the low hundreds. However, the most recent census (June 2010) counted 1,792 singing males.

Jack pine forests are unique ecosystem and their management benefits many other plant and animal species.



OCTOBER 2010



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

				- Company		
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2 KCC Cross Country at LCC Stars Invite at Grand Woods Park in Lansing, noon
3	4	5	6	7 •	8 KCC Firebirds Cross Country Invite, 3 p.m. National Children's Day	9 Leif Erikson Day
10	11 Columbus Day Thanksgiving Canada	12 KCPA Travel Adventure, "Barbados" Discovery Day Bahamas	13	14 College Night at Kirtland CC Student Center, 6-7:30 p.m.	15	16 KCC Cross Country at Fairview, noon National Boss Day Sweetest Day
17	18	19	20	21 KCC Board of Trustees, 7 p.m. at Kirtland House	22	Rich Little presents "Jimmy Stewart" at KCPA, 7 p.m.
24/31 Mother-In-Law Day (24th) Halloween (31st)	25	26	27 Kirtland Youth Theater presents, "Darwin the Dinosaur," at KCPA	28 KCC Student Activities Student Halloween Party at Student Center	29 Kirtland Regional Police Academy graduation	30 KCC womens basketball at MAC in Mio, 2 p.m. KCC cross country MCCAA Reg. XII, noon in Lansing

SEPTEMBER 2010

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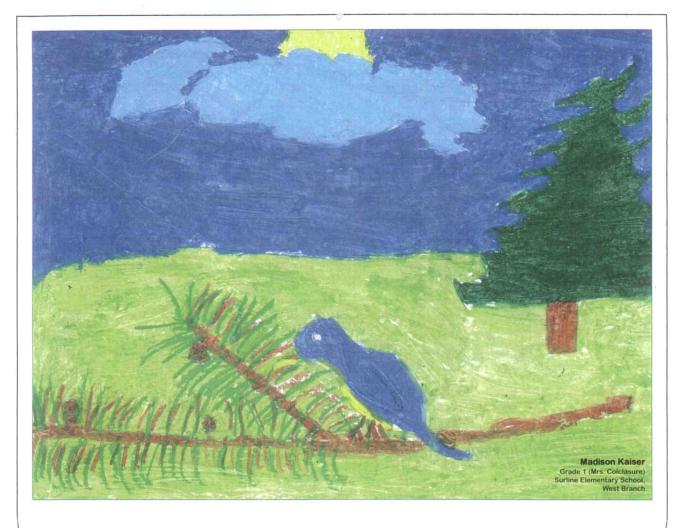
Faith
Ignasiak
Grade 3
(Mrs. Kish &
Miss Wangler)
St. Joseph
Catholic
School,
West Branch



<u>WARBLER WONDERS</u>: Federal and state agencies manage nearly 200,000 acres of jack pine in Michigan for the Kirtland's and other species of plants and animals. Only about one-fifth of this is Kirtland's warbler breeding habitat at any given time.

NOVEMBER 2010

S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



NOVEMBER 2010



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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	All Saints' Day KCC basketball vs. Mid Michigan at MAC in Mio, 5:30/7:30 p.m.	2 All Souls' Day Election Day	3	4	5 KCC mens basketball at Triton College (IL) tourney, TBA	KCC mens basketball at Triton College (IL) tourney, TBA
7 Daylight Saving Time Ends	8 Early winter registraton through Nov. 19 KCC womens basketball at Ind. Tech JV, 5:30 p.m.	9	10	11 Veterans Day (Armistice Day) Remembrance Day Canada Blood drive at KCC	12 Last day to withdraw from classes at KCC for fall 2010 semester	13 KCC womens basketball at Owens CC tourney, TBA; mens at Grand Rapids, 3 p.m.
14 KCC womens basketball at Owens CC tourney, TBA	15 Season opener, Michigan firearms deer season	16	17 KCC basketball at Lansing CC, 5:30/7:30 p.m. KYT, "Step Afrika"	18 KCC Board of Trustees, 7 p.m.	19	20 Step Afrika at KCPA, 7 p.m. KCC womens basketball at St. Clair (Windsor)
21 °	22	23	24 Start of Thanksgiving Break	25 Thanksgiving Day	26 Firebirds Thanksgiving Tourney, at MAC in Mio, TBA	27 Firebirds Thanksgiving Tourney, at MAC in Mio, TBA
28	29	30				

OCTOBER 2010

S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 2431 25 26 27 28 29 30 Kimberly Mendoza Grade 4 (Ms. Fieldhauser) Grayling Elementary School, Grayling



<u>WARBLER WONDERS</u>: Jack pine forests are home to many wildlife species. Kirtland's warblers, deer and snowshoe hare are examples of those that live in young to middle-aged jack pine. Spruce grouse and woodpeckers may be found in older habitat.

DECEMBER 2010 S M I W I F S

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DECEMBER 2010



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

				100		
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 KCC basketball at Schoolcraft 5:30/7:30 p.m.	2 Hanukkah begins	3 KCC womens basketball at Jamestown (NY) tourney, Dec. 3-4, TBA	4 Jim Witter "Christmas Memories" at KCPA, 7 p.m. KCC mens bball at Columbus, 3:30 p.m.
5	6	7 National Pearl Harbor Remembrance Day Wright Brothers Day Islamic New Year	8	9 KCC Board of Trustees, 7 p.m.	10 KCC mens and womens basketball at Alpena CC tourney, TBA	11 End of fall semester at KCC KCC basketball at Alpena CC tourney, TBA
12	13	14	15	16	17	18 KCC basketball at Mid Michigan 1/3 p.m.
19	20	21 First Day of Winter Forefather's Day	22	23 Start of holiday break, KCC closes at 2:30 p.m. and re-opens Jan. 3	24 Christmas Eve	25 Christmas Day
26 Boxing Day Junkaboo Bahamas Kwanzaa begins	27	28	29	30 KCC basketball at Muskegon CC 5:30/7:30 p.m.	31 New Year's Eve	

NOVEMBER 2010

S M I W I F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Emma
Waack
Grade 4
(Miss
Wangler)
St. Joseph
Catholic
School,
West Branch



<u>WARBLER WONDERS</u>: The Kirtland's warbler, considered a habitat specialist, nests on the ground and typically selects nesting sites in stands of jack pine less than 20 years old. The warbler, however, does not nest while wintering in The Bahamas.

JANUARY 2011 S M I W I F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23/3024/31 25 26 27 28 29



JANUARY 2011



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
, ^E .						1 New Year's Day Junkanoo Bahamas
2	3 KCC basketball vs St. Clair CC at MAC in Mio, 5:30/7:30 p.m.	4 •	5 Winter registration at KCC till Jan. 8 KCC basketball at MAC in Mio, 5:30/7:30 p.m.	6	7	8 Winter semester begins at KCC KCC basketball at Henry Ford, 1/3 p.m.
9	10 Save The Eagles Day	11	12 KCC basketball vs. Alpena CC at MAC in Mio, 5:30/7:30 p.m.	13	14	15 KCC basketball vs. Macomb CC at MAC in Mio, 1/3 p.m.
16	17 Benjamin Franklin and Martin Luther King Jr.'s birthdays	18	19 O Blood drive at KCC	20 KCC Board of Trustees, 7 p.m.	21	22 KCC basketball at Mott CC, 1/3 p.m.
23/30	24/31	25	26 Australia Day KCC basketball vs. Delta at MAC in Mio, 5:30/7:30 p.m.	27	28 Gabriel Bolkosky, 7 p.m. at KCPA	29 KCC basketball vs. Schoolcraft at MAC in Mio, 1/3 p.m.

DECEMBER 2010

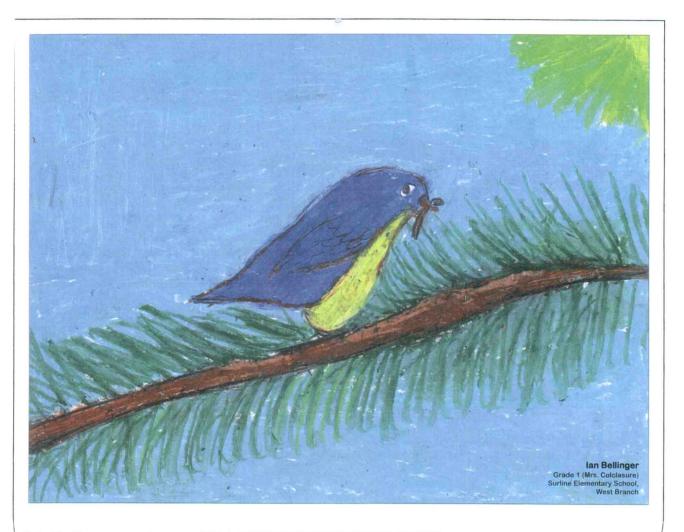
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Zettle
Grade 2
(Ms. Joyce
Stander)
St. Joesph
Catholic
School,
West Branch



<u>WARBLER WONDERS</u>: The Kirtland's warbler was one of the first species listed as endangered under the federal Endangered Species Act of 1973.

FEBRUARY 2011 S M I W I F S

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FEBRUARY 2011



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

				100		
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1 National Freedom Day KCC Winter Welcome Days, Feb. 1-2	2 Groundhog Day KCC basketball at St. Clair CC, 5:30/7:30 p.m.	Chinese New Year	4	5 KCC basketball at Oakland CC, 1/3 p.m.
6	7	8 Boy Scout Day	9 KCC basketball vs. Henry Ford CC at MAC in Mio, 5:30/7:30 p.m.	10	11	12 Lincoln's birthday The Red Green Show at KCPA, 7 p.m.
13	14 Valentine's Day	15	16 KCC basketball at Macomb CC, 5:30/7:30 p.m.	17 KCC Board of Trustees, 7 p.m.	18 °	19
20	21 Presidents' Day KCC basketball at MAC in Mio, 5:30/7:30 p.m.	22 Washington's birthday	23 KCC basketball at Delta, 1/3 p.m.	24	25 KCPA special event, "The Best of the Einsenhower Dance Ensemble"	26
27	28 Start of spring break					

JANUARY 2011

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23/302431 25 26 27 28 29 Russell Mansfield Grade 2 (Jenny Hetfield) AuSable Primary School, Grayling



<u>WARBLER WONDERS</u>: All of the plants in the jack pine ecosystem are adapted to disturbance by fire. Jack pine have extremely flammable needles and serotinous cones – cones that only open after being heated by fire.

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27	28	29	30	31		



MARCH 2011



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2 Read Across America Day Dr. Seuss' Birthday	3	Deadline for KCC students to order cap/gown	5
6 Spring Break ends	7	8 Fat Tuesday Mardi Gras	9 Ash Wednesday	10	11	12 Irish Rovers at KCPA, 7 p.m.
13 Daylight Saving Time Begins	14	15	16 Phi Theta Kappa Honor Society Induction KYT, "If You Give a Mouse a Cookie"	17 St. Patrick's Day KCC Board of Trustees, 7 p.m.	18	19 °
20 First Day of Spring	21	22	23	24	25	26
27	28	29	30	31		

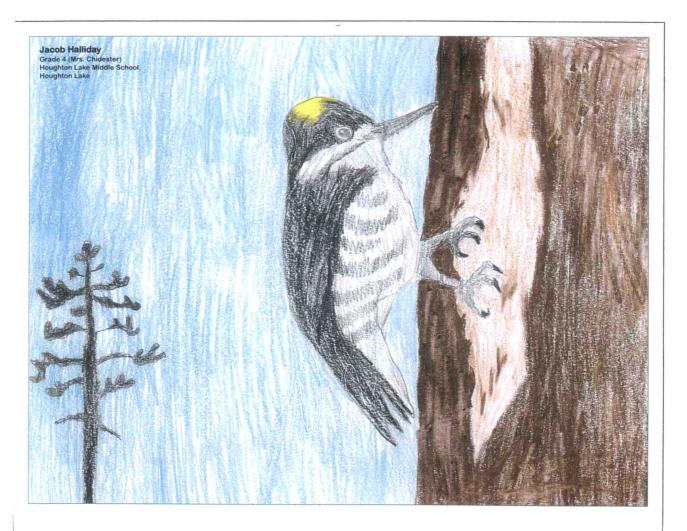
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 Kristen Burrick Grade 6 (Mrs. Lawrence) Crawford Excelsior School, Kalkaska



WARBLER WONDERS: Kirtland's warblers were found in 16 counties in Michigan in 2010. But more than 80 percent of those were found in just five counties - Alcona, Crawford, Iosco, Ogemaw and Oscoda - in northern Lower Michigan.

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APRIL 2011



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 All Fool's Day	2
3 •	4 Early summer and fall registration at KCC, April 4-15	5	6	7	8 Last day to withdraw from classes at KCC for winter 2011 semester	9 Papa Doo Run Run tribute to Beach Boys at KCPA, 7 p.m.
10	11	12 Kirtland Youth Theater, "Happily Ever After" at KCPA	13	14	15 Income Taxes Due	16
17	18 °	19 KCPA Travel Adventure Series, "Yellowstone: Trails and Tales"	20 Blood drive at KCC	21 KCC Board of Trustees, 7 p.m.	22 Good Friday Earth Day Start of Easter Break	23
24 Easter	25 Easter Monday Canada and Bahamas	26	27 Administrative Professionals Day	28	29 Arbor Day KRPA Graduation Commencement at Kirtland CC	30

MARCH 2011

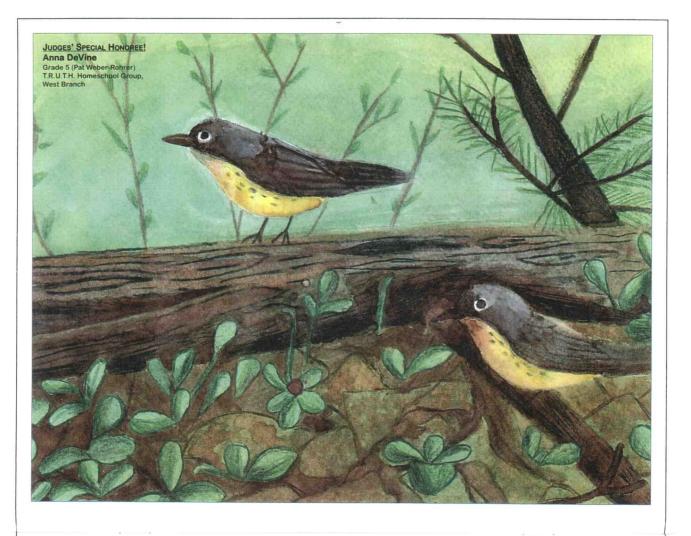
S M I W I F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Cheyanne Ruppert Grade K (Mrs. Barclay) Hale Elementary School, Hale



WARBLER WONDERS: Most Kirtland's warblers nest in the northeastern portion of Michigan's Lower Peninsula. A small number of the song bird nest in the Upper Peninsula, as well as in parts of Wisconsin and Ontario, Canada.

MAY 2011

<u>S</u> <u>M</u> <u>T</u> <u>W</u> <u>T</u> <u>F</u> <u>S</u> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



MAY 2011



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Winter semester at Kirtland CC officially ends May Day	2	National Teachers Day	4	5 Cinco de Mayo	6	7 Robin Spielberg at KCPA, 7 p.m Join Hands Day
8 Mother's Day	9	10	11 Summer and fall semester registration at KCC, May 11-14	12 Nurses Day	13	14
15	16 Start of summer semester at Kirtland CC	17 °	18	19 KCC Board of Trustees, 7 p.m.	20	21 Kirtland's Warbler Wildlife Festival at at Kirtland CC Armed Forces Day
22 National Maritime Day	23 Victoria Day Canada	24	25	26	27	28
29	30 Memorial Day	31				

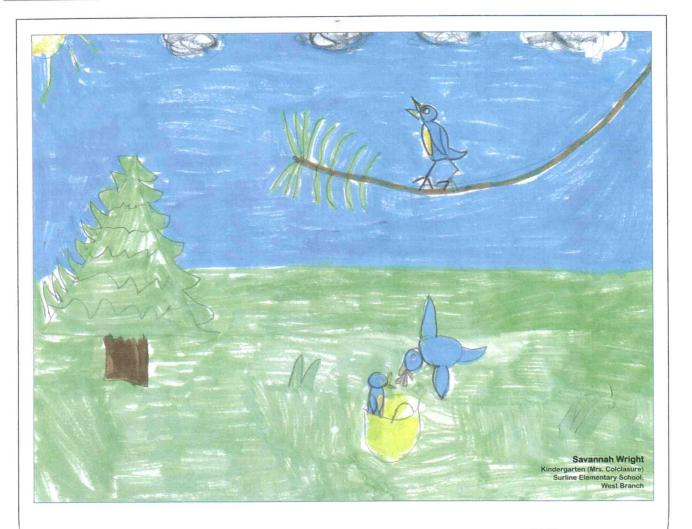
APRIL 2011 S M I W I F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Lindsay Gutierrez Grade 6 (Mr. Clelland) Surline Middle School, West Branch



WARBLER WONDERS: Kirtland's warblers migrate about 1,500 miles to The Bahamas each winter. The birds leave in early August and return to Michigan in May. The little song birds can make the trip in as little as 13 days.

JUNE 2011									
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JUNE 2011



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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 •	2	3 Labour Day Bahamas	An Evening with Jeff Daniels at KCPA, 7 p.m.
5 World Environment Day	6	7	8	9	10	11
12	13 Whit Monday Bahamas	14 Flag Day	15 °	16 KCC Board of Trustees, 7 p.m.	17	18
19 Father's Day Juneteenth	20	21 First Day of Summer	22	23	24	25
26	27	28 Paul Bunyan Day	29	30		

MAY 2011

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Robin
Deisig
Grade 5
(Lucy Mang)
Gaylord
Intermediate
School,
Gaylord



WARBLER WONDERS: The Kirtland's warbler survey, a count of males identified by song, is conducted each year over a 15-day period in early June. This is when the male warblers are singing vigorously to mark and defend their nesting territories.

JULY 2011									
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17	18	19	20	21	22	23			
24/31	25	26	27	28	29	30			



JULY 2011



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SUNDAY	Monda	Y TUESDA	AY WEDNESD	AY THU	RSDAY	FRIDAY	SATURDAY
						1 Canada Day	2
3	4 Indepe	Day for fa	tration Il 2011 at KCC, Ily 5-15	7		8 Last day to withdraw from classes at KCC for summer 2011 semester	9
10 Independence Day Bahamas	11	12	13	14	Bastille Day	15 °	16
17	18	19	20	21	KCC Board of Trustees, 7 p.m.	22	23
24/31 Parents' Day (24th)	25	26	27	28		29	30

JUNE 2011 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Syeanne Young Grade 5 (Mrs. Clouse) Fairview Area Schools, Fairview



<u>WARBLER WONDERS</u>: Kirtland's warblers feed on a variety of crawling and flying insects and larvae. In midsummer, they feed on blueberries when the fruits ripen. Kirtland's feed on insects and small fruits in the Bahamas during the winter.

AUGUST 2011

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AUGUST 2011



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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 End of summer semester at KCC	2	3	4	5	6
7 Friendship Day	8 Emancipation Day Bahamas	9	10	11	12	13 °
14	15	16	17	18 KCC Board of Trustees, 7 p.m.	19 National Aviation Day	20 Official start of 2011 fall semester at KCC
21	22	23	24	25	26 Women's Equality Day	27
28	29 •	30	31			

JULY 2011 S M I W I F S

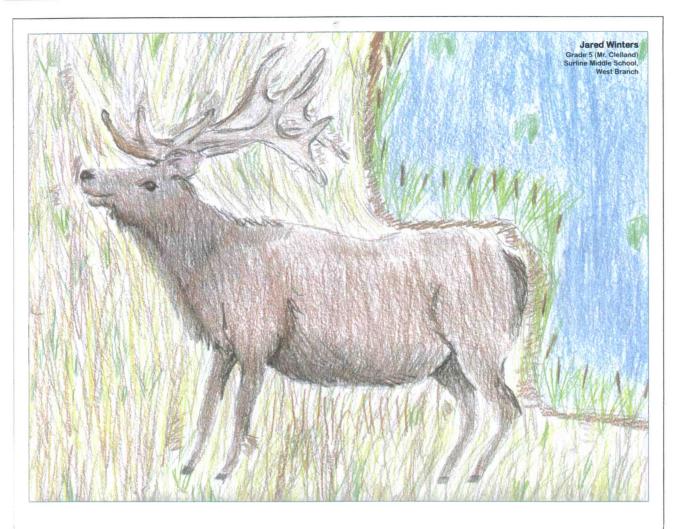
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<u>WARBLER WONDERS</u>: Jack pine stands develop on sandy soils after large forest fires, or after clearcutting and planting. Today, most Kirtland's warblers nest in jack pine plantations.

SEPTEMBER 2011

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SEPTEMBER 2011



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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5 Labor Day	6	7	8	9	10
11 Patriot Day Grandparents Day	12 °	13	14	15 KCC Board of Trustees, 7 p.m.	16 Stepfamily Day	17 Constitution Day & Week
18	19	20	21	22	23 Native American Day First Day of Autumn	24
25	26	27 •	28	29	30	

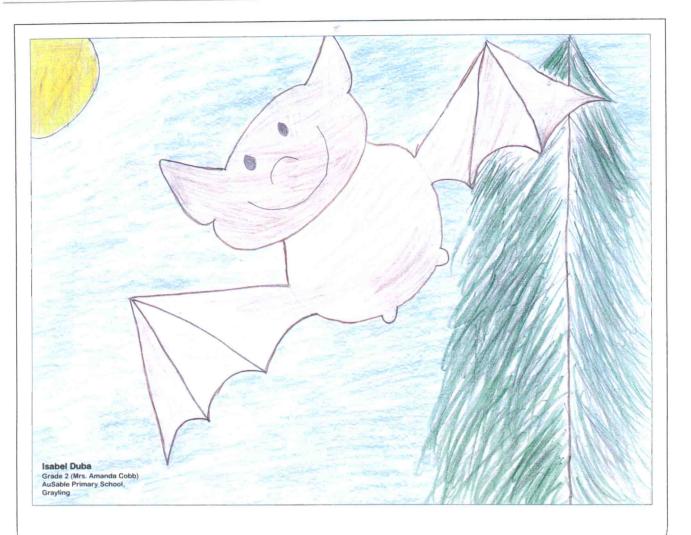
28 29 30 31

Reagan Moffit Grade 7 (Ms. Zuker) Roscommon Middle School, Roscommon



<u>WARBLER WONDERS</u>: After laying four to five eggs, only the female Kirtland's warbler will incubate the eggs for about 14 days. While on the nest, the male brings food to her. The eggs are buff or pinkish white, with brown spots at the larger end.

OCTOBER 2011 S M I W I F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23/3024/31 25 26 27 28 29



OCTOBER 2011



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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8 National Children's Day
9 Leif Erikson Day	10 Columbus Day Thanksgiving Canada	11	12 O Discovery Day Bahamas	13	14	15 Sweetest Day
16 National Boss Day	17	18	19	20 KCC Board of Trustees, 7 p.m.	21	22
23/30 Mother- In-Law Day (23 rd)	24/31 Halloween (31st)	25	26 •	27	28	29

SEPTEMBER 2011

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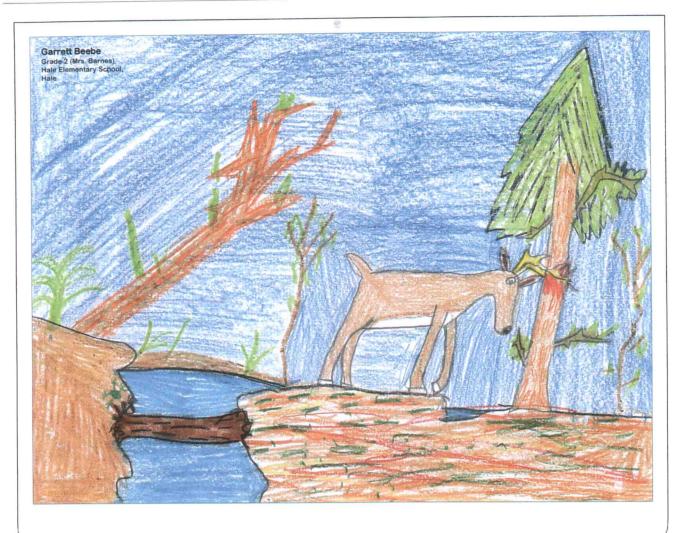
18 19 20 21 22 23 24

25 26 27 28 29 30

Jere Getzinger Grade 2 (J. Stander) St. Joseph Catholic School, West Branch



<u>WARBLER WONDERS</u>: Kirtland's warblers spend their winters (while in the Bahamas) in dense, low scrub vegetation where they feed on insects and small fruits, such as wild sage, black torch and snowberry.



NOVEMBER 2011



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

						C.=
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1 All Saints' Day	2 All Souls' Day	3	4	5
6 Daylight Saving Time Ends	7	8	9	10 O Veterans Day (Armistice Day)	11	12
13	14	15 Season opener, Michigan firearms deer season		17 KCC Board of Trustees, 7 p.m. at Kirtland House	18	19
20	21	22	23	24 Thanksgiving Day	25 •	26 Islamic New Year
27	28	29	30			

OCTOBER 2011 S M I W I F S

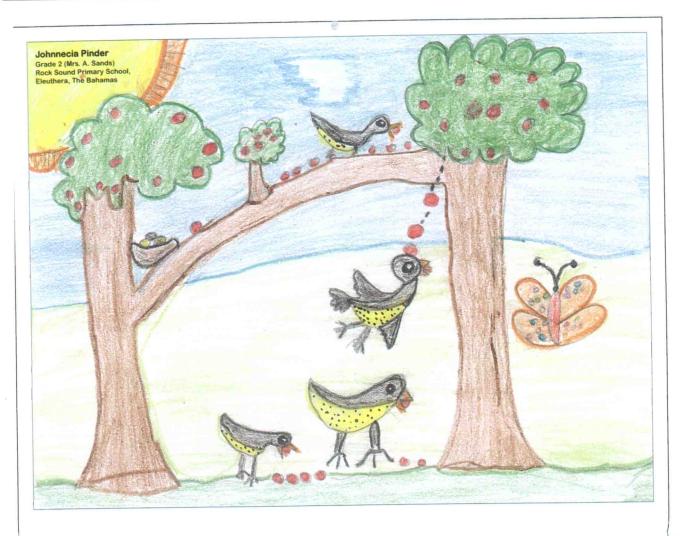
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Kaitlyn Girardin Grade 4 (Jeffrey Fitzgibbon) Houghton Lake Middle School, Houghton Lake



WARBLER WONDERS: Only male Kirtland's warblers sing. And, on a calm day, the male's song can be heard a quarter of a mile away.

S M I W I E S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



DECEMBER 2011



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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1 Kirtland Youth Theater, "The Fantastic Toy Shoppe" at KCPA	2	3
4	5	6	7 National Pearl Harbor Remembrance Day	8	9	10 °
11 End of 2011 fall semester at KCC	12	13	14	15 KCC Board of Trustees, 7 p.m.	16	17 Wright Brothers Day
18	19	20	21 First Day of Winter Forefather's Day Hanukkah begins	22	23	24 • Christmas Eve
25 Christmas Day	26 Boxing Day Junkaboo Bahamas Kwanzza begins	27	28	29	30	31 New Year's Eve

NOVEMBER 2011 S M I W I E S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

27 28 29 30

Claudia Wilson Grade 3 (Rosanne Miller) Fairview Area Schools, Fairview



<u>WARBLER WONDERS</u>: Brown-headed cowbirds lay their eggs in Kirtland's warbler's nests, with the warblers then raising cowbird young instead of their own. Since 1972, cowbird trapping has significantly reduced nest parasitism.

JANUARY 2012

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22 23 24 25 26 27 28
29 30 31



JANUARY 2012



The Kirtland's Warbler Wildlife Festival is brought to you by Kirtland Community College, Michigan Dept. of Natural Resources & Environment, U.S. Forest Service, U.S. Fish & Wildlife Service and many dedicated volunteers.

	0000					
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 New Year's Day Junkanoo Bahamas	2	3	4	5	6	7 Official start of 2012 winter semester at KCC
8	9 0	10 Save The Eagles Day	11	12	13	14
15	16 Martin Luther King Jr.'s birthday	17 Benjamin Franklin's birthday	18	19 KCC Board of Trustees, 7 p.m.	20	21
22	Chinese New Year	24	25	26 Australia Day	27	28
29	30	31				

DECEMBER 2011

<u>S</u> <u>M</u> <u>T</u> <u>W</u> <u>T</u> <u>F</u> <u>S</u> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Kaysheena Collins Grade 6 (Mrs. Glenda M. Miller) Wemyss Bight Primary School, The Bahamas



WARBLER WONDERS: Kirtland's warblers usually return to the same location for their wintering grounds in the Bahamas year after year. There, a small warbler will typically range over a 50-acre area until its return to Michigan in early May.

FEBRUARY 2012

S M I W I F S 1 2 3 4

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12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29

HONORABLE MENTION



Crimsun Hayes Grade 2 (Jenny Hetfield) AuSable Primary School, Grayling



Emma Mertes
Grade 2 (Jenny Hetfield)
AuSable Primary School, Grayling



Jenna Schwartz Grade 2 (Mrs. Kami Boik) AuSable Primary School, Grayling



Brett Turner Grade 2 (Cheryl Hatfield) AuSable Primary School, Grayling



Leah Klein
Grade 7 (Sue Lawrence)
rawford Excelsior School, Kalkaska



Malayna Swartzendruber Grade K (Erin Howard) Crawford Excelsior School, Kalkaska



Sam Herbon
Grade 1 (Mrs. Howard)



Foster Krone Grade 3 (Rosanne Miller) Fairview Area Schools, Fairview



Jenna DeJarlais Grade 5 (Mrs. Clouse) airview Area Schools, Fairview



Jeremy Fleszar Grade 5 (Mrs. Clouse) irview Area Schools, Fairview



Tala Barton
Grade 5 (Mrs. Clouse)
Fairview Area Schools, Fairview



Amairis Blair Grade 3 (Ms. Schlachter) Grayling Elementary School, Grayling



Ashley Vitale Grade 3 (Ms. Schlachter) Grayling Elementary School, Grayling



Emma Bonamie Grade 3 (Mrs. Canfield) Grayling Elementary School, Grayling



Amber Leonard Grade 3 (Mrs. Rasch) Hale Elementary School, Hale



Gage Everitt Grade 3 (Mrs. Look) Hale Elementary School, Hale



Hannah Moffatt Grade 3 (Mrs. Look) Hale Elementary School, Hale



Kaycee Max Grade 5 (Mrs. Baczynski) Hale Elementary School, Hale



Felicity Wright Grade 5 (Mrs. Hasty) Hale Middle School, Hale



Keely Bigger Grade 5 (Mrs. Hasty) Hale Middle School, Hale



Synthia Shellenbarger Grade 5 (Mrs. Hasty)



Hunter Tyrrell Grade 4 (Mrs. Chidester) Houghton Lake Middle, Houghton Lake



Megan Hadley Grade 4 (Mrs. Chidester) loughton Lake Middle, Houghton Lak



Dominick Burkett Grade 1 (Mrs. Bawek) Our Lady of the Lake School, Prudenvill



Jackson MacKenzie Grade 2 (Mrs. Bawek) Our Lady of the Lake School, Prudenville



Oliva Masters Grade 2 (Mrs. Bawek) Our Lady of the Lake School, Prudenvill



Emily Barnhart Grade 4 (Mrs. Mayes) scommon Elementary, Roscommon



Jessica Hollister Grade 3 (Mrs. House)



Patrick Fink Grade 4 (Mrs. Plainte)



Cody Thompson Grade 8 (Mr. Goulette) oscommon Middle School, Roscommon

Count 'em up: It wasn't really all that long ago when Harold Mayfield organized the first Kirtland's warbler census in 1951. The second census took place in 1961 and the third in 1971. After the census totals dropped 60 percent from 502 in 1961 to 201 in 1971, an ad hoc Kirtland's warbler advisory committee recommended holding the census annually starting in 1972 to closely monitor the population. The results are also used as an aid for evaluating management practices. The Kirtland's warbler census is held June 6-20 each year and is a count of singing males, as the females do not sing. - Mike Petrucha, MDNRE



Kalen Church
Grade 7 (Mrs. Zuker)



Tessa Richards
Grade 8 (Mr. Goulette)



Claire Hines Grade K (Phelps) se City Elementary, Rose City



Cody Ferns
Grade 4 (Mrs. Kristy Neubecker)
Rose City Elementary, Rose City



Kourtney Wiltse Grade 1 (Mrs. Curtis) ose City Elementary, Rose City



Hunter Likavec Grade 5 (Mrs. Timo) St. Joseph Catholic School, West Branch



Colleen Sikorski Grade 3 (Mrs. Kish) Joseph Catholic School, West Branch



Kiera Hansen
Grade K (Mrs. Wendi Paulson)
Joseph Catholic School, West Branch



Evan Prusinski Grade 2 (Mrs. Colclasure) tine Elementary School, West Branch



Kaitlin Randall Grade 3 (Mrs. Colclasure) line Elementary School, West Branch



Haily Davis Grade 2 (Mrs. Colclasure) Surline Elementary School, West Branch



Brook Davis
Grade 5 (Mr. Clelland)



Cameron Diaz Grade 6 (Mr. Clelland) urline Middle School, West Branch



Tyler Symons Grade 6 (Mr. Clelland) surline Middle School, West Branch



Jackie Schliter Grade 4 (Pat Weber-Rohrer) R.U.T.H. Homeschool, West Branch

atural History: As plants and animals followed the northward retreat of the glaciers 12,000 to 16,000 years ago, they formed a variety of natural communities. The warm climate and moist, rich soils of the southern half of the Lower Peninsula eventually fostered the growth of deciduous forests. Farther north, as the Wisconsin ice sheet melted, it deposited a glacial till and left a sandy outwash plain which was dry and nutrient poor. The plants and animals which came to dominate this large area formed the coniferous forests. One of the most fascinating of these northern forests is the jack pine ecosystem. - MDNRE



Jean Peterson Grade 7 (Pat Weber-Rohrer) T.R.U.T.H. Homeschool, West Branch



Reese Riedel Grade 4 (Pat Weber-Rohrer) T.R.U.T.H. Homeschool, West Branci



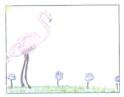
Brianna Puckett Grade 2 (Mrs. Debra Mersnick) Three Lakes Academy, Curtis



Lila MacKinnon Grade 3 (Susan Vaniman) Three Lakes Academy, Curtis



Sierra Stark
Grade 2 (Mrs. Debra Mersnick)
Three Lakes Academy, Curtis



Kesyha Grade 5 (Mrs. J. Claridge) Green Castle Primary School, Bahama



Wendell Nesbitt Grade 4 (Mrs. A. Richards) Green Castle Primary School, Bahamas



Ledeswanique Nixon Grade 6 (Mrs. E. Deal)



Shaloam Johnson Grade 1 (Ms. A. Johnson) Rock Sound Primary School, Bahamas



Brittney Cooper Grade 6 (Mrs. Sharon Carey) St. Anne's Catholic School, Bahamas



Shanice Symonette Grade 6 (Mrs. Carey) St. Anne's Catholic School, Bahama



Jonathan Adderley Grade 6 (Mrs. V. Miller)



Lance Pelecanos Grade 6 (Mrs. V. Miller) Tarpum Bay Primary School, Bahan



Dashonei Johnson Grade 6 (Mrs. G.M. Miller) Wemyss Bight Primary School, Baham



Randal Tynes Grade 5 (Mrs. C. Martin) Jemyss Bight Primary School, Bahamas

Kirtland's Warbler Wildlife Festival Committee members

Jim Enger (chairman), Kirtland Community College Dennis Mansfield, Kirtland Community College Irene Borak, volunteer coordinator Tom Dale, KCC (ret.) and Gahagan Nature Preserve Marj Esch, Kirtland Community College Bob Hess, Michigan DNRE (ret.) Phil Huber, U.S. Forest Service Lynn Taylor, Kirtland Community College Roberta Eveleth, Kirtland Community College Denise Kemp, Kirtland Community College Jackie Liddle, Kirtland Community College Chris Mensing, U.S. Fish & Wildlife Service Kyle Morrison, Kirtland Community College Mike Petrucha, Michigan DNRE Mark Schroeder, Kirtland Community College Jerry Weinrich, Michigan DNRE (ret.) Craig Kasmer, Michigan DNRE Tom & Wynatte Hamilton of Hamilton Construction

Congratulations and enjoy!

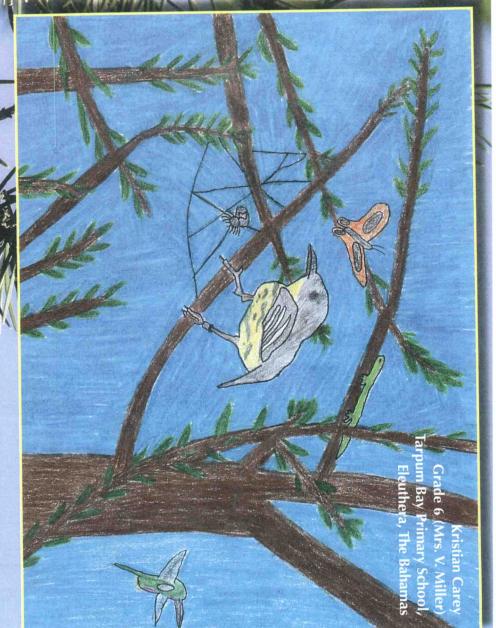
Members of the Kirtland's Warbler Wildlife Festival Committee hope you'll enjoy the eighth edition of our Young Artists Calendar.

The calendar was conceived as a project, among many others, to help elementary and middle school students better understand our rarest warbler and the unique ecosystems in which this endangered species spends its life.

More than 1,000 students in grades K-8 from more than 17 schools, from both Michigan and the Bahamas, submitted entries for the 2010-11 calendar contest. Most of them also learned from retired kirtland science instructor Tom Dale about the many other animals and birds that benefit from the management of Kirtland's jack pine habitat, which is extremely prevalent in Kirtland Community College's district that includes all of Crawford, Ogemaw, Oscoda and Roscommon counties, as well as parts of five neighboring counties.

Dale visited dozens of schools during the spring in 2010, as he does every year, speaking to thousands of youngsters, inspiring many to submit the artwork you now hold in your hands.

The festival committee congratulates the young artists whose wonderful work is featured here, as well as all the children who submitted entries, and their teachers.



national Program of the U.S. Forest Service it schools on Eleuthera. Funding for the project has been its to participate in the contest, and to the researchers he Kirtland's Warbler Wildlife Festival Committee is ormed by scientists from the Nature Conservance Sheis under way -I children in the Bahamas, where the Kiriland es of entries for this year's Young Artists Forestry of the U.S. Forest Service and the ication and the University of the Bahamai fy and study the habitat preferred by the - most notably on the island

Kirtland's Warbler Wildlife Festival

us on the Meb at warbler.kirtland.edu or call Kirtland Community College 989-275-5000, extension 242.