



Iowa's Frog and Toad Call Survey 2006



2006 Survey Results

2006 was the 16th year for Iowa's frog and toad call survey. A total of 39 routes in 31 counties were surveyed. The routes surveyed contained a total of 209 sites which were visited 537 times in the course of 3 runs (Table 1). Participation in the survey was up just slightly from 2004 which had 38 routes and 197 sites surveyed. The top three wetland communities surveyed were permanent open water, open marsh, and timbered riverine. These descriptions characterize over half of the sites surveyed (Table 2).

Average weather conditions were well within the parameters of the survey. No major weather irregularities were reported and comments by surveyors on weather were mixed – parts of Iowa getting more rain than others. Water temperatures for over half of the records were reported and the average for each run was well above recommended levels. Surveys were generally run on calm (low wind) clear nights (Table 3).

Chorus frogs are consistently the most reported and abundant species, and in 2006, they were heard at the most sites (61 % of total sites, Table 4). They were especially dominant during the first run as would be expected. American toads and Eastern gray treefrogs were the second and third most-reported species, and they clearly dominated the middle run along with cricket frogs, which were calling at the highest average abundance level (2.17). In fact, while chorus frogs are found on more sites, the American toad is heard on more surveys because its singing chronology allows it to be heard more evenly across all three runs. This is also true to a lesser extent for the Eastern gray tree frog.

Four species have not been heard in the last several years of surveys: wood frog, crawfish frog, great plains toad, and plains spadefoot (Table 4). The last report of a plains spadefoot and great plains toad was 2000. Lack of reports may be attributed to loss of surveyed routes within the limited range of these species. The crawfish frog is a state endangered species and is likely extirpated from the state. More routes in its limited distribution range would be useful. The wood frog has been reported variably throughout the years, and within the past year, we had a local herpetologist try to verify these records. He was unable to and found that most of the wood frog reports were actually Northern leopard frogs, which have a variable repertoire of calls and can be confused with the wood frog.

Overall, 2006 data were consistent with recent years. There were no dramatic dips in species that have been heard consistently.

In the Coming Year

Some of you have attended a NatureMapping workshop to receive training in herp surveys and know that we had been having technical difficulties with our online database. We have revamped the database and the program which we are calling the Volunteer Wildlife Monitoring Program, and we are in the midst of holding three workshops. We will continue to hold these workshops every year, moving them around the state. This will hopefully recruit some new volunteers especially in parts of the state where we have holes in our data.

Thank You!

There are not very many surveys that span 16 years. The fact that Iowa's frog and toad survey has is a tribute to your dedication and willingness to spend several nights each summer driving around and listening for frog and toad songs. Finding a night that fits the weather parameters, fits into your schedule, and won't totally disrupt your sleep patterns is a challenge which many of you have admirably conquered for years. We cannot say enough how important and appreciated your participation in this survey is. Thank you.

And if you know of any other folks who like to hang around outside at night please direct them our way!

Table 1. 2006 Route and Site Data

<i>Num. of Active* Routes</i>	52
<i>Num. of Active Routes Run in 2006</i>	39 (75%)
<i>Routes visited Run 1</i>	34
<i>Routes visited Run 2</i>	36
<i>Routes visited Run 3</i>	34
<i>Num. of Active Sites</i>	273
<i>Num. of Active Sites Run in 2006</i>	209 (76%)
<i>Sites visited Run 1</i>	180
<i>Sites visited Run 2</i>	185
<i>Sites visited Run 3</i>	172
<i>Total Num. of Visits made in 2006</i>	537
<i>Total Number of Counties Surveyed</i>	31

* Active = Site/route visited within the last three years.

Table 2. Type of Wetlands Surveyed

Wetland Type	Num. Sites in 2006	% of Total
Permanent Open Water	61	29.2%
Open Marsh	36	17.2%
Timbered Riverine	30	14.4%
Cattail Marsh	22	10.5%
Open Riverine	22	10.5%
Ephemeral Flooded Area	12	5.7%
Wet-Meadow	12	5.7%
Shrub Marsh	7	3.3%
Unknown	7	3.3%

Table 3 2006 Weather and Timing for each Survey Run

Weather and Timing	Runs		
	1	2	3
<i>Average Date</i>	4/19/2006	5/24/2005	7/1/2006
<i>Water Temp (F)</i>	58.06	68.78	76.23
<i>Average Beginning Air Temp (F)</i>	61.67	70.16	74.33
<i>Average End Air Temp (F)</i>	56.07	67.40	71.99
<i>Average Wind (combined Begin and End)*</i>	0.73	1.39	0.57
<i>Avg Cloud Cover (combined Begin and End)**</i>	0.49	0.43	0.73

* Wind Codes: 0: 0 mph, 1: 1-3 mph, 2: 4-7 mph, 3: 8-12 mph, 4: 13-18 mph, 5: 19-24 mph

** Cloud Codes: 0: Clear, 1: Partly Cloudy, 2: Cloudy, 3: Fog, 4: Drizzle, 5: Rain Shower

Table 4. 2006 Frog and Toad Survey Species Data

Number of Records Per Run
 (count of the num. of site surveys
 during which species was detected)

Species	Sites on which species detected	% of Total Sites	Number of Records Per Run			Total Num. Visits	Average call index 1=Single to 3=Full Chorus
			1	2	3		
<i>Chorus Frog</i>	127	61.1%	120	35	16	156	1.86
<i>American Toad</i>	126	60.6%	60	93	37	190	1.84
<i>Eastern Gray Treefrog</i>	106	51.0%	17	81	70	167	1.80
<i>Cricket Frog</i>	93	44.7%	7	66	68	141	2.17
<i>Bull Frog</i>	79	38.0%	5	25	70	100	1.25
<i>Leopard Frog</i>	66	31.7%	48	24	9	81	1.46
<i>Spring Peeper</i>	47	22.6%	43	19	3	65	2.0
<i>Green Frog</i>	45	21.6%	4	19	42	65	1.45
<i>Cope's Gray Treefrog</i>	35	16.8%	5	27	14	46	1.72
<i>Pickereel Frog</i>	3	1.4%	1	2	0	3	1
<i>Woodhouse's Toad</i>	3	1.4%	0	2	1	3	2
<i>Wood Frog</i>	0	0.0%	0	0	0	0	NA
<i>Crawfish Frog</i>	0	0.0%	0	0	0	0	NA
<i>Great Plains Toad</i>	0	0.0%	0	0	0	0	NA
<i>Plains Spadefoot</i>	0	0.0%	0	0	0	0	NA

Fig 1. These graphs show the percent of wetlands where the frog or toad was found at any time during the given year between 1995 and 2006.

