CARD
Center for Agricultural and Rural Development

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

www.card.iastate.edu/lakes-survey

Password: <<Password>>

In order to make sound decisions concerning the future of Iowa lakes, it is important to understand how they are used, as well as which factors influence your selection of lakes to visit. The answers you give to the questions in this survey are very important. Even if you have not visited any lakes in Iowa, please complete and return the questionnaire. It is critical for our research to understand the characteristics and views of both those who use and those who do not use Iowa's lakes.

In this first section of the survey, we would like to find out which of the lakes on the enclosed map you or any members of your household visited and what you did there.

1. **Have you or any member of your household visited any lakes in Iowa this year?**

   ☐ Yes ☐ No

   If you checked "No" to question 1 skip to question 8 on page 12.

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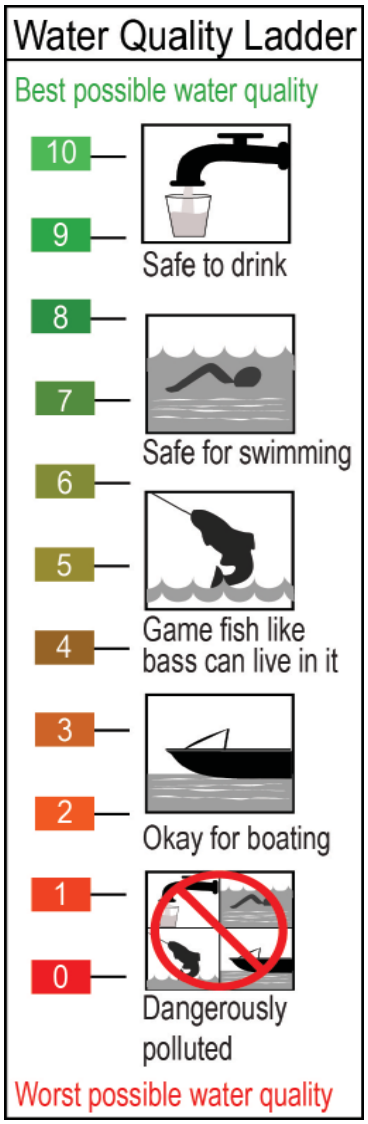
2. **We are very interested in your and your household's usage of Iowa's lakes—the activities you undertake while visiting them, and your perception of the water quality.**



On the table of lakes listed on pages 4–10 we ask you to do the following:

- Record the number of single day and overnight visits you made since January 1, 2014 or plan to make before December 31, 2014.
- Place a checkmark in each of the appropriate boxes to indicate the activities you undertook or plan to undertake in 2014.
- For any lake with which you are familiar, please rate the water quality by assigning a number between 0 and 10 based on the water quality ladder pictured. Familiar lakes include both those that you have visited this year as well as those you have visited in the recent past.

Reading the Water Quality Ladder

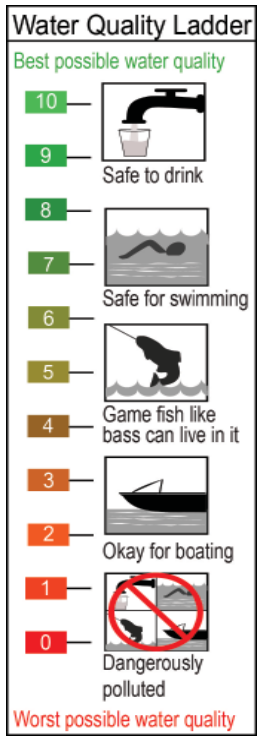
The Water Quality Ladder runs from 0 to 10. The lowest level, 0, is so polluted that it has raw sewage, animal waste, toxic algae, and/or other things in it like trash; it has almost no plant or animal life, smells bad, and contact with it is dangerous to human health.

In contrast, water quality that is a 2 or 3 ("boatable") would not harm you if you happened to fall into it for a short time while boating or sailing. Water quality that rates a 4, 5, or 6 ("fishable") is a higher level of quality than "boatable." Although some kinds of fish can live in boatable water, it is only when water is "fishable" that game fish like bass can live in it. Finally, a rating of 7 or 8 ("swimmable") is water of a high enough quality that it is safe to swim in and ingest in small amounts.

This information is very important.
Please record the **NUMBER** *of times you have visited or plan to visit a lake.*

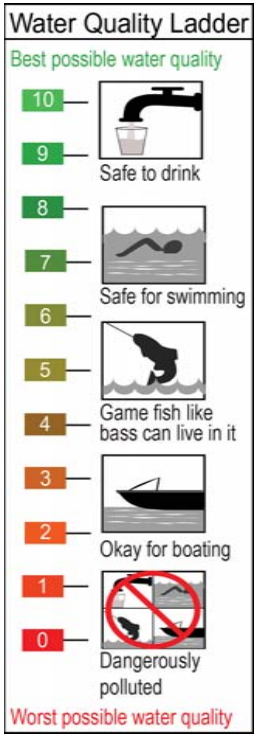
Name of Lake (County)	Number of visits (Jan. – Dec. 2014)		Please check all that apply										
	Single-day trips	Overnight trips	Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	Water Quality Assessment 0 to 10
Ada Hayden Lake (Story)													
Arbor Lake (Poweshiek)													
Arrowhead Lake (Sac)													
Arrowhead Pond (Pottawattamie)													
Avenue of the Saints Pond (Bremer)													
Badger Creek Lake (Madison)													
Badger Lake (Webster)													
Beaver Lake (Dallas)													
Beeds Lake (Franklin)													
Belva Deer Lake (Keokuk)													
Big Creek Lake (Polk)													
Big Hollow Lake (Des Moines)													
Big Spirit Lake (Dickinson)													
Black Hawk Lake (Sac)													
Blue Lake (Monona)													
Blue Heron Lake (Polk)													
Bob White Lake (Wayne)													
Briggs Woods Lake (Hamilton)													
Browns Lake (Woodbury)													
Brushy Creek Lake (Webster)													
Carter Lake (Pottawattamie)													

Name of Lake (County)	Number of visits (Jan. – Dec. 2014)		Please check all that apply										
	Single-day trips	Overnight trips	Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	Water Quality Assessment 0 to 10
Casey Lake [aka Hickory Hills Lake] (Tama)													
Center Lake (Dickinson)													
Central Park Lake (Jones)													
Clear Lake (Cerro Gordo)													
Cold Springs Lake (Cass)													
Coralville Reservoir (Johnson)													
Crawford Creek Impoundment (Ida)													
Crystal Lake (Hancock)													
DeSoto Bend Lake (Harrison)													
Diamond Lake (Poweshiek)													
Dog Creek Lake (O'Brien)													
Don Williams Lake (Boone)													
East Lake (Osceola) (Clarke)													
East Okoboji Lake (Dickinson)													
Easter Lake (Polk)													
Eldred Sherwood Lake (Hancock)													
Five Island Lake (Palo Alto)													
Fogle Lake (Ringgold)													
Volga Lake [aka Frog] Hollow Lake (Fayette)													
Lake Geode (Henry)													
George Wyth Lake (Black Hawk)													

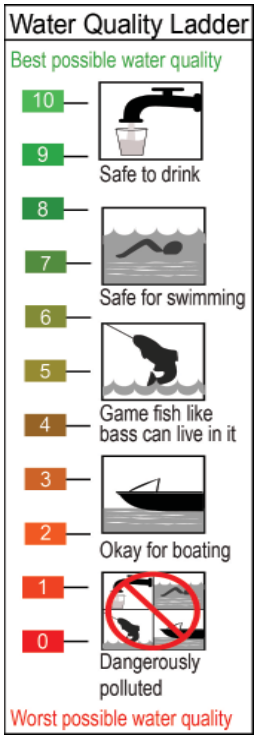


This information is very important.
Please record the **NUMBER** *of times you have visited or plan to visit a lake.*

Name of Lake (County)	Number of visits (Jan. – Dec. 2014)		Please check all that apply										Water Quality Assessment 0 to 10
	Single-day trips	Overnight trips	Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	
Grays Lake (Polk)													
Green Belt Lake (Black Hawk)													
Green Castle Lake (Marshall)													
Green Valley Lake (Union)													
Greenfield Lake (Adair)													
Hannen Lake (Benton)													
Hawthorne Lake [aka Barnes City Lake] (Mahaska)													
Hickory Grove Lake (Story)													
Hooper Area Pond (Warren)													
Indian Lake (Van Buren)													
Ingham Lake (Emmet)													
Lake Iowa (Iowa)													
Kent Park Lake (Johnson)													
Lacey Keosauqua Park Lake (Van Buren)													
Lake Ahquabi (Warren)													
Lake Anita (Cass)													
Lake Cornelia (Wright)													
Lake Darling (Washington)													
Lake Hendricks (Howard)													
Lake Icaria (Adams)													
Lake Keomah (Mahaska)													

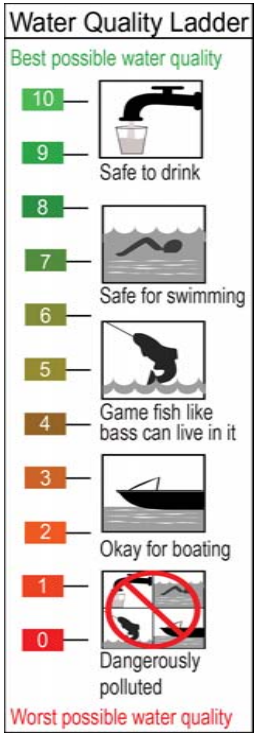


Name of Lake (County)	Number of visits (Jan. – Dec. 2014)		Please check all that apply										Water Quality Assessment 0 to 10
	Single-day trips	Overnight trips	Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	
Lake Macbride (Johnson)													
Lake Manawa (Pottawattamie)													
Lake Meyer (Winneshiek)													
Lake Miami (Monroe)													
Lake of the Hills (Scott)													
Lake of Three Fires (Taylor)													
Lake Pahoja (Lyon)													
Lake Smith (Kossuth)													
Lake Sugema (Van Buren)													
Lake Wapello (Davis)													
Little River Lake (Decatur)													
Little Sioux Park Lake (Woodbury)													
Little Spirit Lake (Dickinson)													
Little Wall Lake (Hamilton)													
Littlefield Lake (Audubon)													
Lizard Lake (Pocahontas)													
Lost Grove Lake (Scott)													
Lost Island Lake (Palo Alto)													
Lower Gar Lake (Dickinson)													
Lower Pine Lake (Hardin)													
Manteno Park Pond (Shelby)													

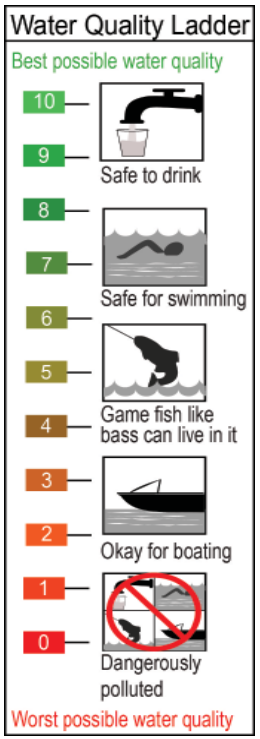


This information is very important.
Please record the **NUMBER** *of times you have visited or plan to visit a lake.*

Name of Lake (County)	Number of visits (Jan. – Dec. 2014) Single-day trips	Overnight trips	Please check all that apply: Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	Water Quality Assessment 0 to 10
Mariposa Lake (Jasper)													
Meadow Lake (Adair)													
Meyers Lake (Black Hawk)													
Mill Creek Lake (O'Brien)													
Minnewashta Lake (Dickinson)													
Mitchell Lake (Black Hawk)													
Moorhead Park Pond (Ida)													
Mormon Trail Lake (Adair)													
Nelson Park Lake (Crawford)													
Nine Eagles Lake (Decatur)													
Nodaway Lake (Adair)													
North Twin Lake (Calhoun)													
Oldham Lake (Monona)													
Orient Lake (Adair)													
Otter Creek Lake (Tama)													
Ottumwa Lagoon (Wapello)													
Pierce Creek Pond (Page)													
Pleasant Creek Lake (Linn)													
Pollmiller Park Lake (Lee)													
Prairie Rose Lake (Shelby)													
Rathbun Reservoir (Appanoose)													

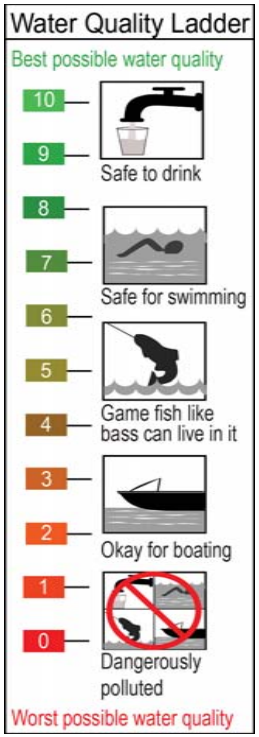


Name of Lake (County)	Number of visits (Jan. – Dec. 2014)		Please check all that apply										Water Quality Assessment 0 to 10
	Single-day trips	Overnight trips	Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	
Red Haw Lake (Lucas)													
Red Rock Reservoir (Marion)													
Roberts Creek Lake (Marion)													
Rock Creek Lake (Jasper)													
Rodgers Park Lake (Benton)													
Rudd Lake (Floyd)													
Saylorville Reservoir (Polk)													
Silver Lake (Worth)													
Silver Lake (Palo Alto)													
Silver Lake (Dickinson)													
Silver Lake (Delaware)													
Slip Bluff Lake (Decatur)													
Snyder Bend Lake (Woodbury)													
South Prairie Lake (Black Hawk)													
Spring Lake (Greene)													
Springbrook Lake (Guthrie)													
Storm Lake (Buena Vista)													
Summit Lake (Union)													
Swan Lake (Carroll)													
Thayer Lake (Union)													
Three Mile Lake (Union)													



This information is very important.
Please record the **NUMBER** *of times you have visited or plan to visit a lake.*

Name of Lake (County)	Number of visits (Jan. – Dec. 2014)		Please check all that apply										
	Single-day trips	Overnight trips	Boating with motor	Canoeing, kayaking, or sailing	Jet skiing, water skiing, or tubing	Swimming and/or beach use	Fishing	Camping	Relaxing, and or picnicking	Nature/ wildlife watching	Trail use	Other	Water Quality Assessment 0 to 10
Twelve Mile Creek Lake (Union)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Union Grove Lake (Tama)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Upper Gar Lake (Dickinson)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Upper Pine Lake (Hardin)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Viking Lake (Montgomery)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
West Lake [Osceola] (Clarke)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
West Okoboji Lake (Dickinson)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
White Oak Lake (Mahaska)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Williamson Pond (Lucas)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Willow Lake (Harrison)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Wilson Park Lake (Taylor)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Windmill Lake (Taylor)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Yellow Smoke Park Lake (Crawford)	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Other Lake 1:	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐
Other Lake 2:	☐☐	☐☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐☐



3. If you checked "other" in the table of lakes and activities on pages 4-10, in which other activities did you or your household participate?

☐ Hunting ☐ Paddleboarding ☐ Snowmobiling
☐ Cross-country skiing ☐ Other:_____

4. Please check which of the following best describes a typical lake visit for you or your household.

☐ I visit with other family members
If so, how many ☐☐
☐ I visit with friends or relatives not in my household
If so, how many ☐☐
☐ I go alone

5. What time of year do you or your household make most of your lake trips?

☐ Spring (about March to May) ☐ Fall (about September to November)
☐ Summer (about June to August) ☐ Winter (about December to February)

6. If you or a member of your household boat on Iowa lakes, please check each type of boat used.

☐ Canoe ☐ Kayak ☐ Powerboat ☐ Personal water craft (Jet Ski, WaveRunner, etc.)
☐ Fishing boat ☐ Sailboat ☐ Paddleboard ☐ Other:_____

7. What is the model and year of the vehicle that you or a household member typically use to visit lakes?

Vehicle Type

☐ Car/station wagon
☐ Mini van
☐ Sports utility vehicle (SUV)
☐ Pickup truck/van (cargo or passenger) other truck
☐ RV (recreational vehicle)
☐ Motorcycle/motorbike
☐ No vehicle (walking or biking)

Vehicle Year: ☐☐☐☐

8. Please indicate how often you or other members of your household visited lakes or rivers in each of the following locations this year.

	Single-day trips	Overnight trips
Lakes in Minnesota	☐☐ (# trips)	☐☐ (# trips)
Lakes in Missouri	☐☐ (# trips)	☐☐ (# trips)
Lakes in Nebraska	☐☐ (# trips)	☐☐ (# trips)
Lakes in South Dakota	☐☐ (# trips)	☐☐ (# trips)
Lakes in Wisconsin	☐☐ (# trips)	☐☐ (# trips)
The Missouri River	☐☐ (# trips)	☐☐ (# trips)
The Mississippi River	☐☐ (# trips)	☐☐ (# trips)

9. This year (January-December 2014), did you or members of your household visit a river or stream, or do you plan to visit a river or stream, in Iowa (including the border rivers)?

☐ Yes ☐ No

10. Assume you have a total of 100 importance points to assign to the following characteristics when choosing a lake for recreation. Please indicate the importance of each factor by allocating your 100 points among the items on this list. To indicate one item is more important to you than another, you should allocate more points to it. You do not need to give points to all of the items, but remember that the total needs to equal 100.

Diversity of wildlife	☐☐☐ pts.
Good water clarity	☐☐☐ pts.
Hard, clean sandy bottom in swimming area	☐☐☐ pts.
Lack of water odor	☐☐☐ pts.
Little/no suspended sediment in water (no brown water)	☐☐☐ pts.
No/minimal algae blooms or scum (no bright green water)	☐☐☐ pts.
Quality of fish (species diversity and fish caught)	☐☐☐ pts.
Safety from bacterial contamination/ no health advisories	☐☐☐ pts.
Well-manicured shorelines and beach area	☐☐☐ pts.
TOTAL	1 0 0 pts.

11. Assume you have a total of 100 importance points to assign to the following factors in choosing a lake for recreation. Please indicate the importance of each factor by allocating your 100 points among the items on this list. To indicate one item is more important to you than another, you should allocate more points to it. You do not need to give points to all of the items, but remember that the total needs to equal 100.

Activities at the lake	☐☐☐	pts.
Activities in the town	☐☐☐	pts.
Location of friends/relatives	☐☐☐	pts.
Park facilities	☐☐☐	pts.
Proximity	☐☐☐	pts.
Water quality	☐☐☐	pts.
Other:_____	☐☐☐	pts.
TOTAL	1 0 0	**pts.**

12. Lakes in Iowa can become polluted from a variety of different sources. Pollutants that reach Iowa's lakes and rivers contribute to poor water quality at any given lake. Please rank, in your opinion, the following potential pollutant sources for Iowa's lakes from 1 (least important/smallest contributing source) to 6 (most important/largest contributing source).

Numerical Ranking

- ☐ Agricultural runoff (nitrogen and phosphorus fertilizer, sediment)
- ☐ Confined animal feeding operations and manure application to agricultural fields
- ☐ Urban runoff (nitrogen and phosphorus fertilizer, storm water)
- ☐ Trash/litter
- ☐ Oil or other household hazardous wastes
- ☐ Other:_____

OR

- ☐ I don't know

13. In general, relative to lake water quality in surrounding states, Iowa's lake water quality is (please check one):

☐ Way better ☐ Slightly better ☐ About the same ☐ Slightly worse
☐ Way worse ☐ I don't know

14. Do you use social media?

☐ Yes ☐ No

15. Please check all social media/information websites you have used for the following reasons (Check all that apply):

Purpose	Facebook	Twitter	Instagram	Flickr	YouTube	Pinterest	Tripadvisor	Google Apps*	Other
Any purpose	☐	☐	☐	☐	☐	☐	☐	☐	(_____)
Finding travel information in general	☐	☐	☐	☐	☐	☐	☐	☐	(_____)
Finding information about lakes	☐	☐	☐	☐	☐	☐	☐	☐	(_____)
Sharing travel information in general	☐	☐	☐	☐	☐	☐	☐	☐	(_____)
Sharing information about lakes	☐	☐	☐	☐	☐	☐	☐	☐	(_____)

*Google+, Picasaweb, Panoramio

16. Please check all of the places where you get information about water quality.

- ☐ Local newspapers (published weekly or bi-weekly – example The DeWitt Observer)
- ☐ Statewide or regional newspapers (published daily – example The Des Moines Register)
- ☐ National Newspaper (published daily – example The Washington Post)
- ☐ General Internet searches
- ☐ Local TV or radio broadcasts
- ☐ National TV or radio broadcasts
  - ☐ ABC
  - ☐ NBC/MSNBC
  - ☐ CNN
  - ☐ NPR
  - ☐ PBS
  - ☐ FOX News
  - ☐ CBS
  - ☐ Other:_____
- ☐ Environmentally-focused websites (e.g., EPA, USGS, USDA, Sierra Club, etc.)
- ☐ Commodity group publications (example - Farm Bureau News)
- ☐ Social media outlets
- ☐ Other:_____

17. How do you typically access the DNR website http://www.iowadnr.gov?

☐ PC/laptop ☐ Tablet

☐ Smartphone ☐ I do not use the Iowa DNR website

Information about you and other members of your household will help us better understand how household characteristics affect an individual's use of Iowa lakes and attitudes toward changes in them. It will also help us to determine how representative our sample is of the state of Iowa. All of your answers are strictly confidential. The information will only be used to report comparisons among groups of people. We will never identify individuals or households with their responses. Please be as complete in your answers as possible. Thank you.

18. What is your age?

- ☐ 18–25
- ☐ 26–34
- ☐ 35–49
- ☐ 50–59
- ☐ 60–75
- ☐ 76 +

19. How long has your household been living in Iowa?

- ☐ Less than 5 years
- ☐ 5–9 years
- ☐ 10–14 years
- ☐ 15–19 years
- ☐ 20 or more years

20. What is your gender? ☐ Male ☐ Female

21. What is the highest level of schooling that you have completed? (Please check only one)

- ☐ Some high school or less
- ☐ High school graduate
- ☐ Some college or trade/vocational school
- ☐ College graduate
- ☐ Advanced degree

22. How many adults (including yourself) live in your household? ☐☐

23. How many children (under 18) live in your household? ☐☐

24. What is your current employment status?

- ☐ Full time
- ☐ Part time
- ☐ Student
- ☐ Unemployed
- ☐ Retired

25. What is your total household income (before taxes) for 2014?

- ☐ Under $10,000
- ☐ $10,000–$14,999
- ☐ $15,000–$19,999
- ☐ $20,000–$24,999
- ☐ $25,000–$29,999
- ☐ $30,000–$34,999
- ☐ $35,000–$39,999
- ☐ $40,000–$49,999
- ☐ $50,000–$59,999
- ☐ $60,000–$74,999
- ☐ $75,000–$99,999
- ☐ $100,000–$124,999
- ☐ $125,000–$149,999
- ☐ Over $150,000

Thank you for your participation in this survey. Your completed survey should be returned to:

Catherine Kling
260 Heady Hall Iowa State University
Ames, IA 50011-1070