

**Surveys summarized by education level - 61 Adult Surveys; no youth responses**

**C = college and post graduate degrees, 51%**

**L = less than a college degree, 49%**

1. Age: C: 66% \_ 40-49 L: 45% \_ 40-49

2. Gender: C: 72% F, 25% M L: 77% F, 19% M

3. Combined Household Income: C: 63% over \$80,000 L: 35% over \$80,000  
23% \$50,000 – \$59,999

4. Last Educational Level Completed:

C: 51% College or post graduate degree 49% L: Less than a college degree, does include associates degree or technical program.

5. Total property acreage:

C: 56% 1-5 ac. L: 48% 1-5 ac.

6. My property is located in:

C: 53% Washington Co. L: 39% Washington Co.  
29% Kent Co.

7. Type and number of animals on my property: Please write in the number of each type of animal that you currently have.

C:	L:
53% chickens	45% horses
50% rabbits	45% rabbits
41% horses	32% chickens
31% goats	13% dairy cattle
	13% goats

8. Number of years that you have owned/kept animals:

C: 15 years (1-50) L: 23 years (1.5 – 50)

Number of hours per week spent caring for animals:

C: 11 (0-30) L: 19 (2-60)

The following people care for the animals, check all that apply:

C: 94% adults, 84% youth L: 100% adults, 81% youth

9. Top reasons for owning/keeping animals:

C:

- 80% pleasure & enjoyment
- 35% competition/ show
- 25% food/ fiber
- 64% teach children values/responsibility
- 38% service/ education

Selected as #1 choice:

- 55% pleasure & enjoyment
- 3% competition/ show
- 3% food/ fiber
- 23% teach children values/ responsibility

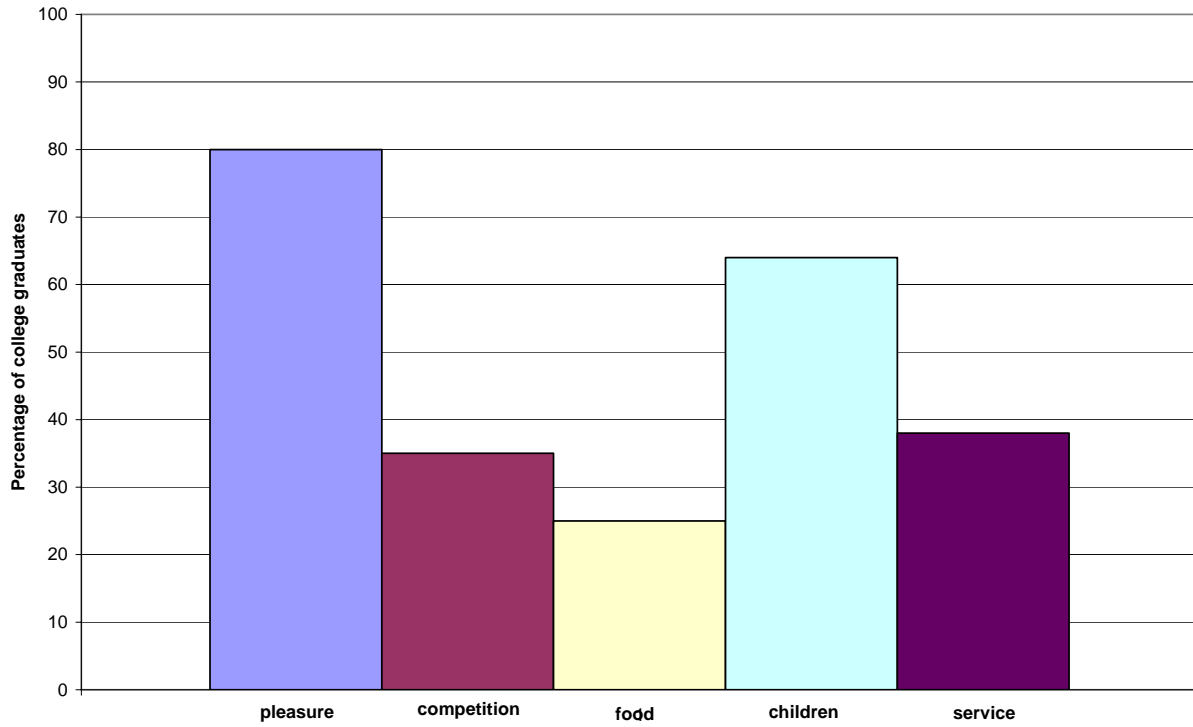
L:

- 93% pleasure & enjoyment
- 57% competition/ show
- 33% food/ fiber
- 67% teach children values/ responsibility
- 39% service/ education
- 3% property maintenance

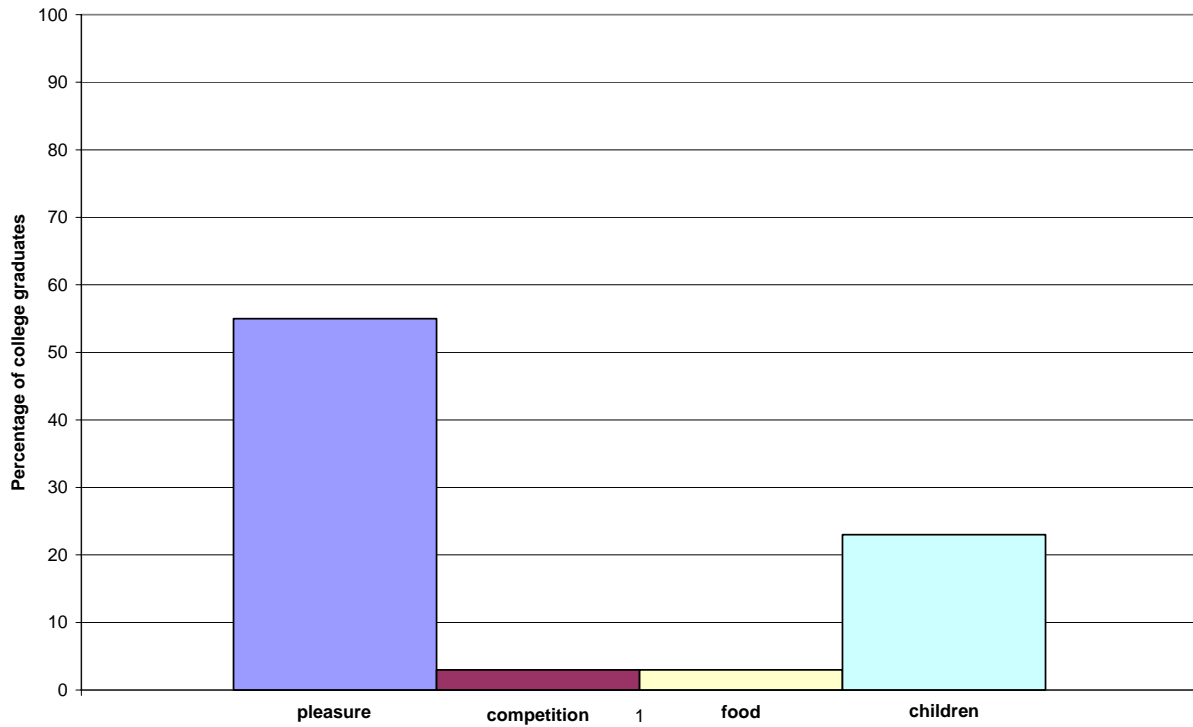
Selected as #1 choice:

- 40% pleasure & enjoyment
- 7% competition/ show
- 3% food/ fiber
- 13% teach children values/ responsibility

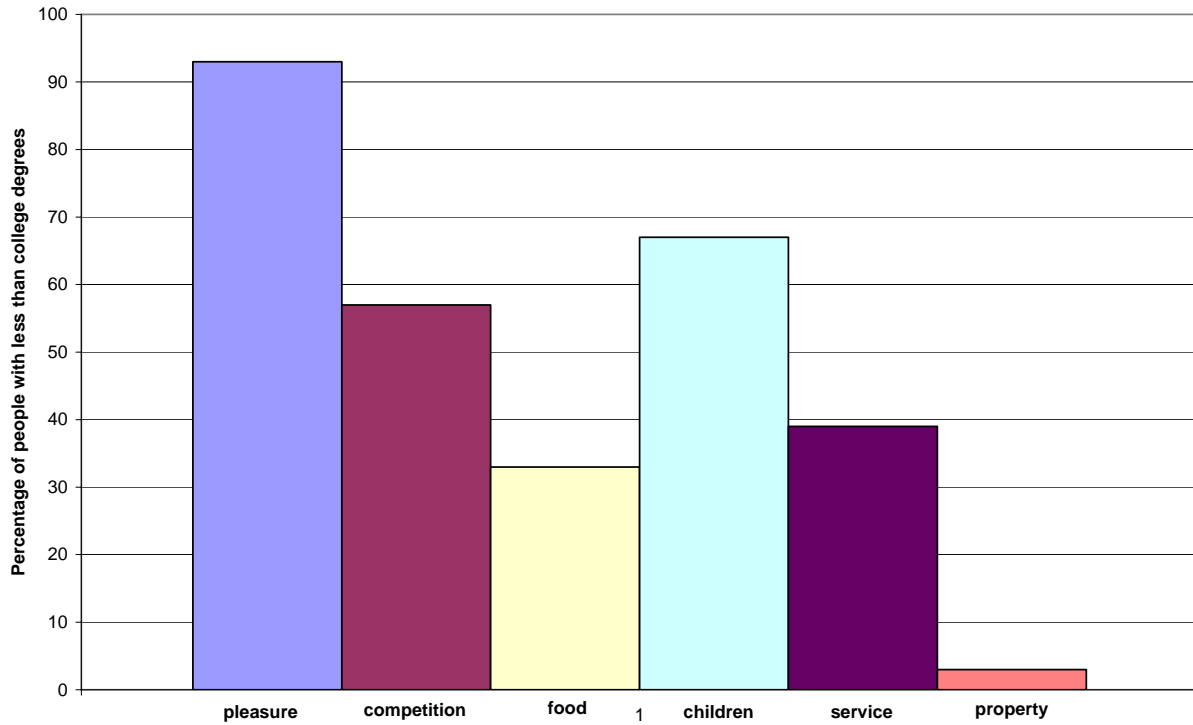
**Reasons for Owning Animals: College**



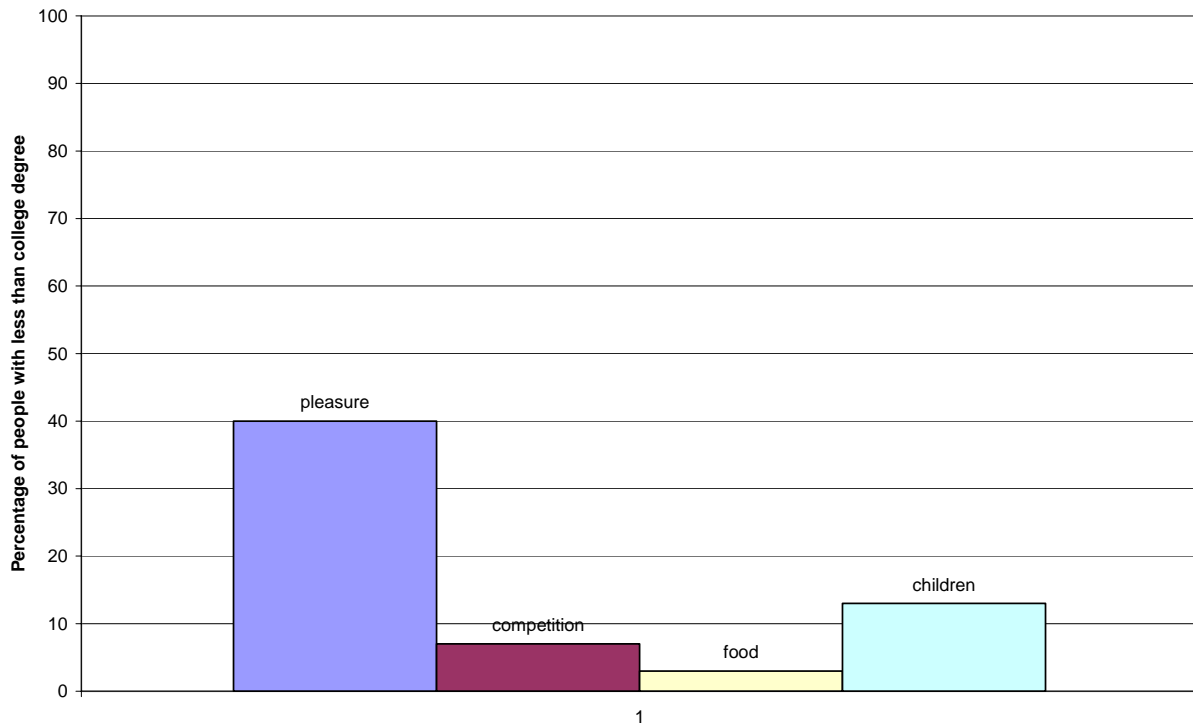
**#1 Reasons for Owning Animals: College**



**Reasons for Owning Animals: Less than college**



**#1 Reasons for Owning Animals: Less than college**



11. Top sources that you rely on most for seeking information about caring for your animals:

C:

71% farmers/ experienced owners  
54% veterinarian  
28% animal professionals  
38% family and friends  
9% university/ extension  
6% state and federal govt  
37% animal association  
38% feed/ supply stores  
50% internet  
58% books  
25% magazines

Selected as #1 choice:

29% farmers/ experienced owners  
13% veterinarian  
6% animal professionals  
6% family and friends  
6% animal association  
3% feed/ supply stores  
6% internet  
13% books

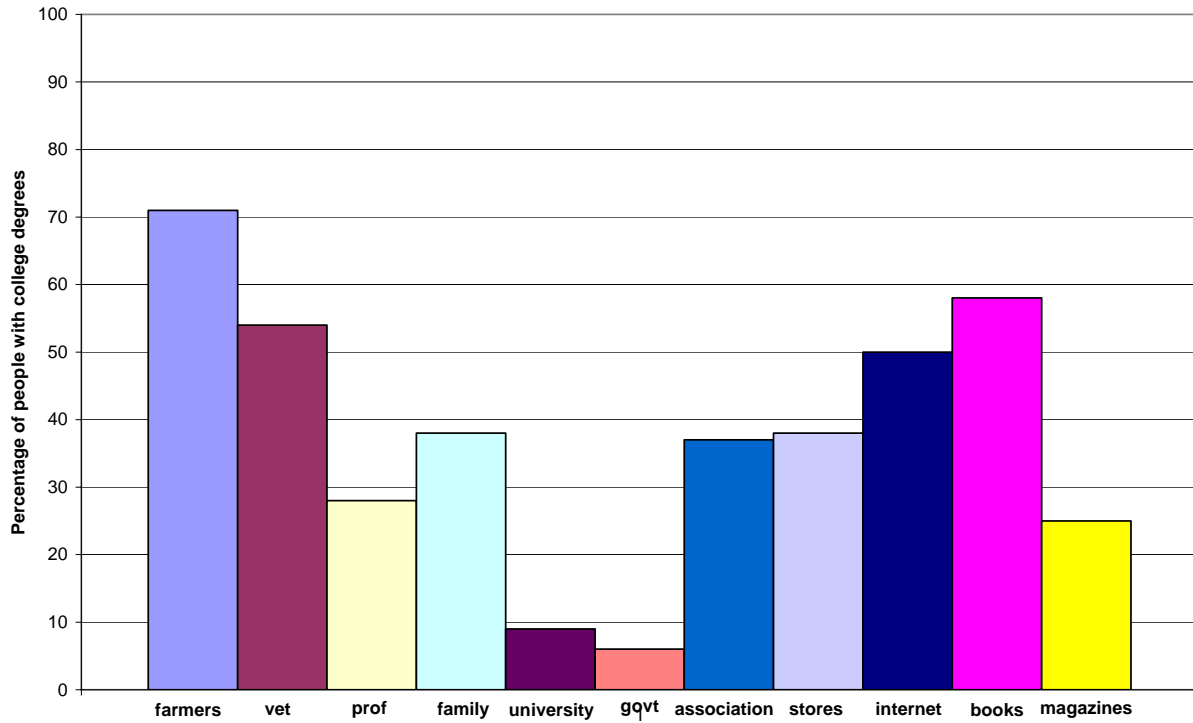
L:

84% farmers/ experienced owners  
77% veterinarian  
40% animal professionals  
53% family and friends  
3% university/ extension  
7% state and federal govt  
33% animal association  
43% feed/ supply stores  
44% internet  
44% books  
33% magazines

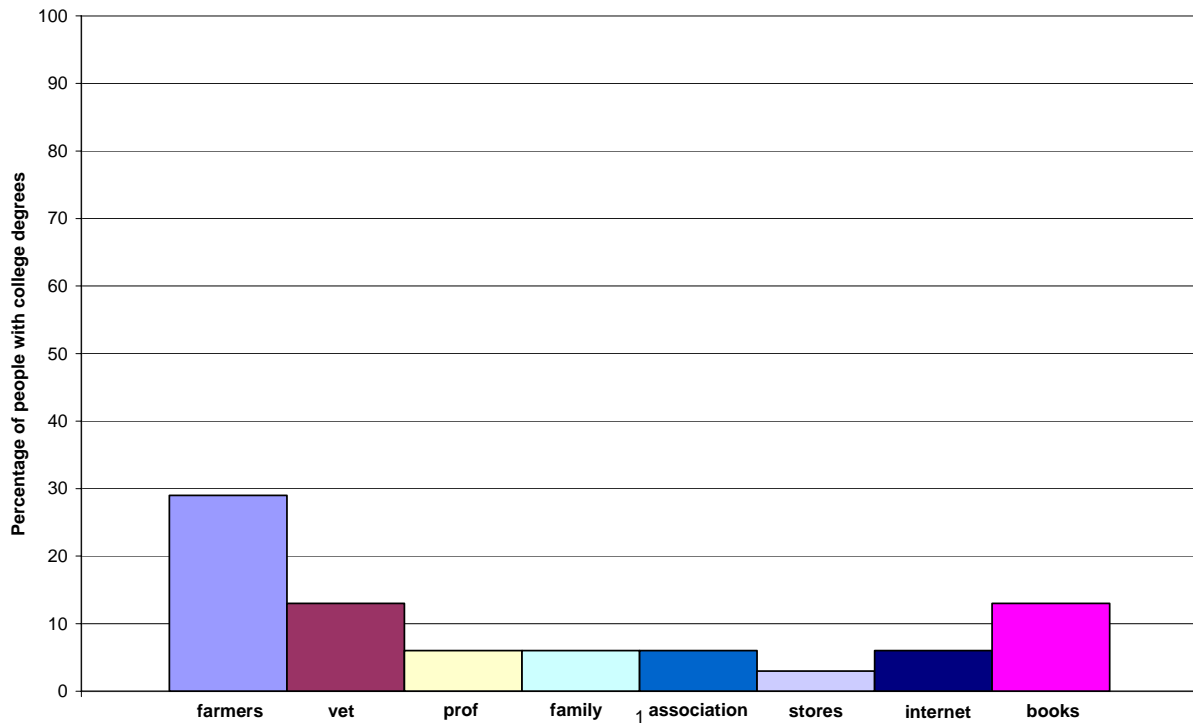
Selected as #1 choice:

33% farmers/ experienced owners  
10% veterinarian  
7% animal professionals  
7% family and friends  
3% animal association  
7% internet

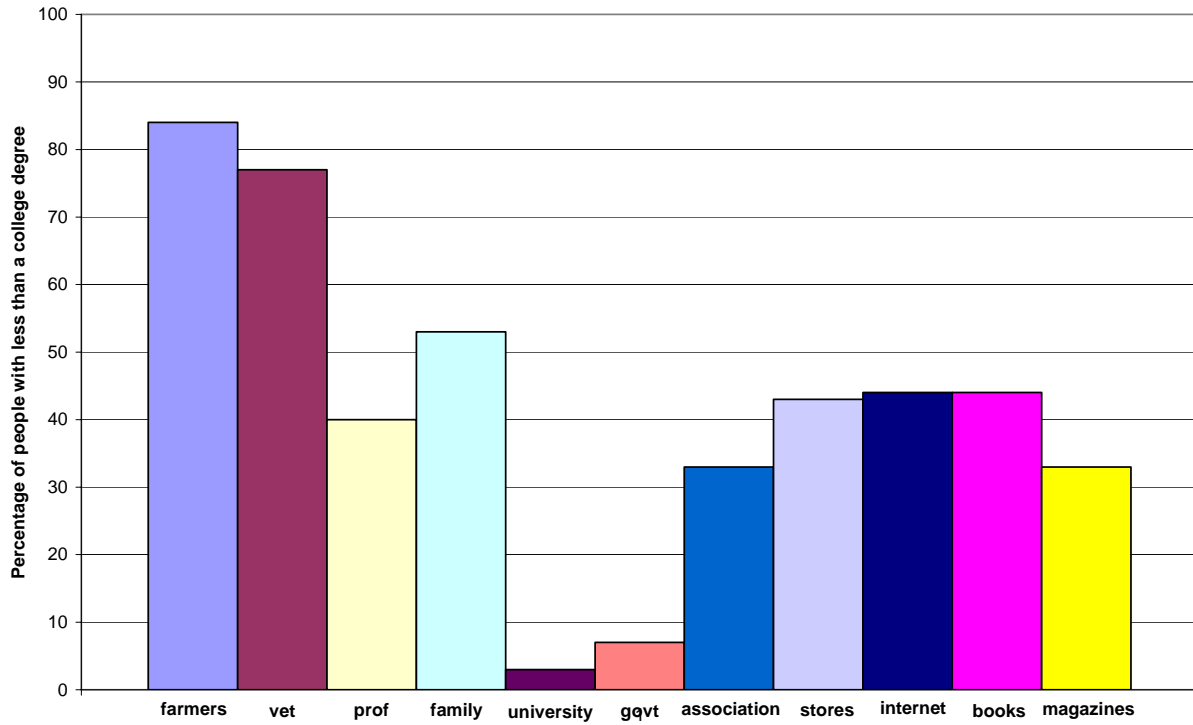
**Selected as source of info relied on most: College**



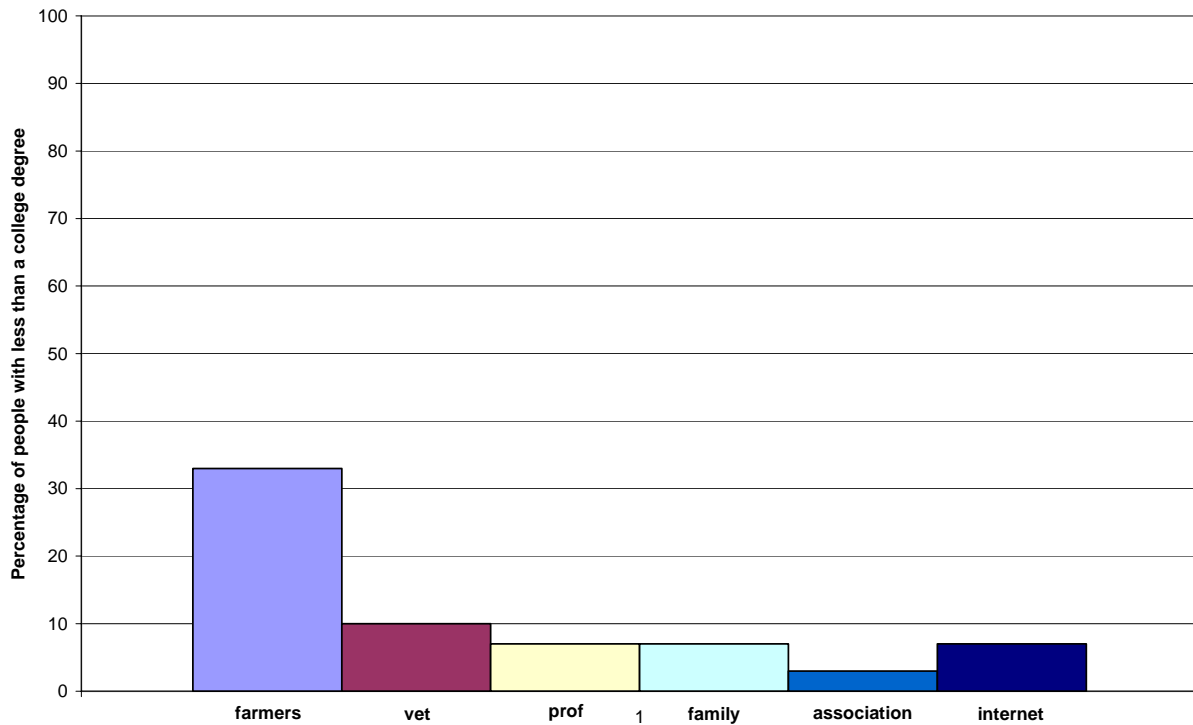
**#1 Sources relied on most: college**



**Selected as source of info relied on most: less than college**



**#1 Sources relied on most: less than college**



12. Top ways you prefer to learn new information that you can apply at home.

C:

- 71% how to guides
- 23% how to video/ DVD
- 32% one-on-one
- 71% hands-on workshop
- 9% multi-week course
- 26% short indoor talk/ seminar
- 32% farm tour
- other: 2 people indicated internet

L:

- 54% how to guides
- 34% how to video/ DVD
- 33% one-on-one
- 47% hands-on workshop
- 6% multi-week course
- 23% short indoor talk/ seminar
- 46% farm tour

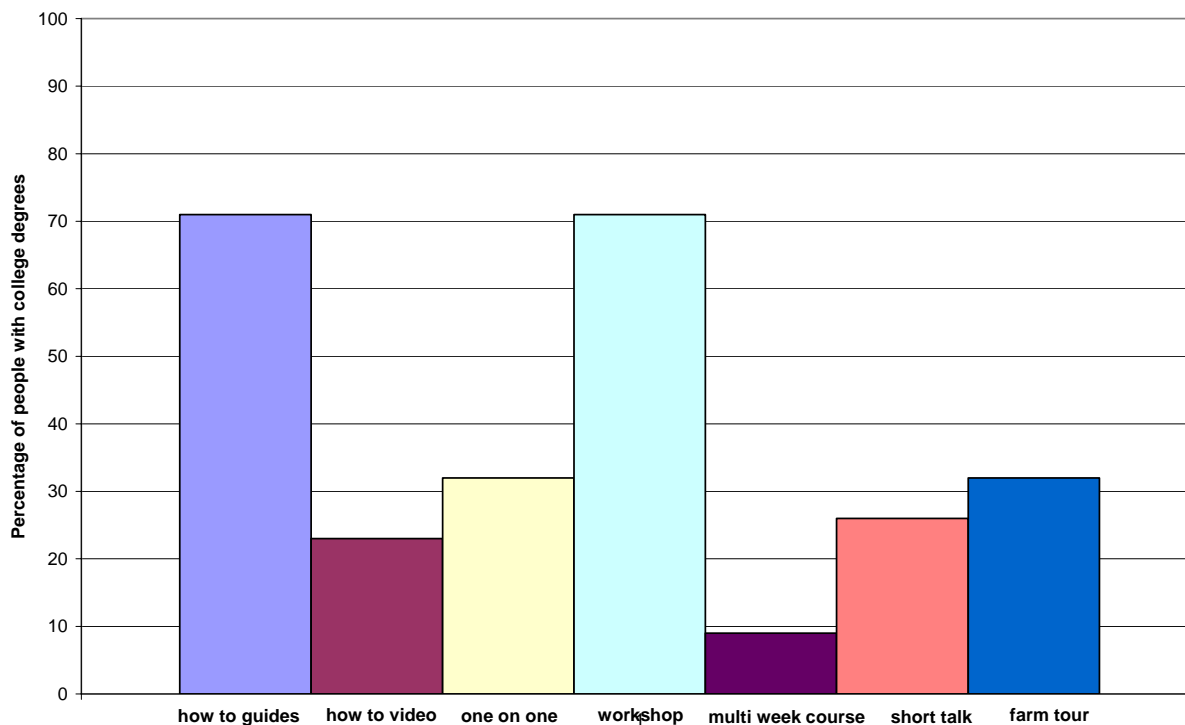
Selected as #1 choice:

- 19% how-to guides
- 16% one-one-one
- 29% hands-on workshop
- 6% short indoor talk/ seminar
- 16% farm tour

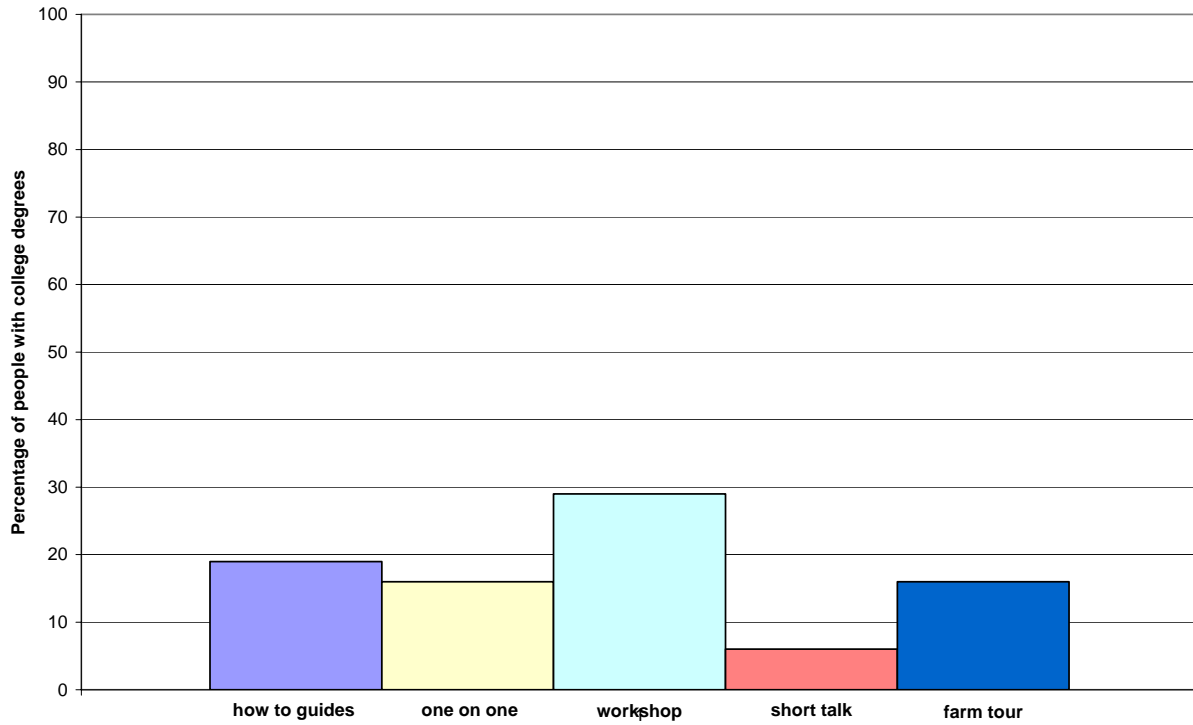
Selected as #1 choice:

- 20% how-to guides
- 7% how-to video/DVD
- 20% one-on-one
- 17% hands-on workshop
- 3% multi-week course
- 13% farm tour

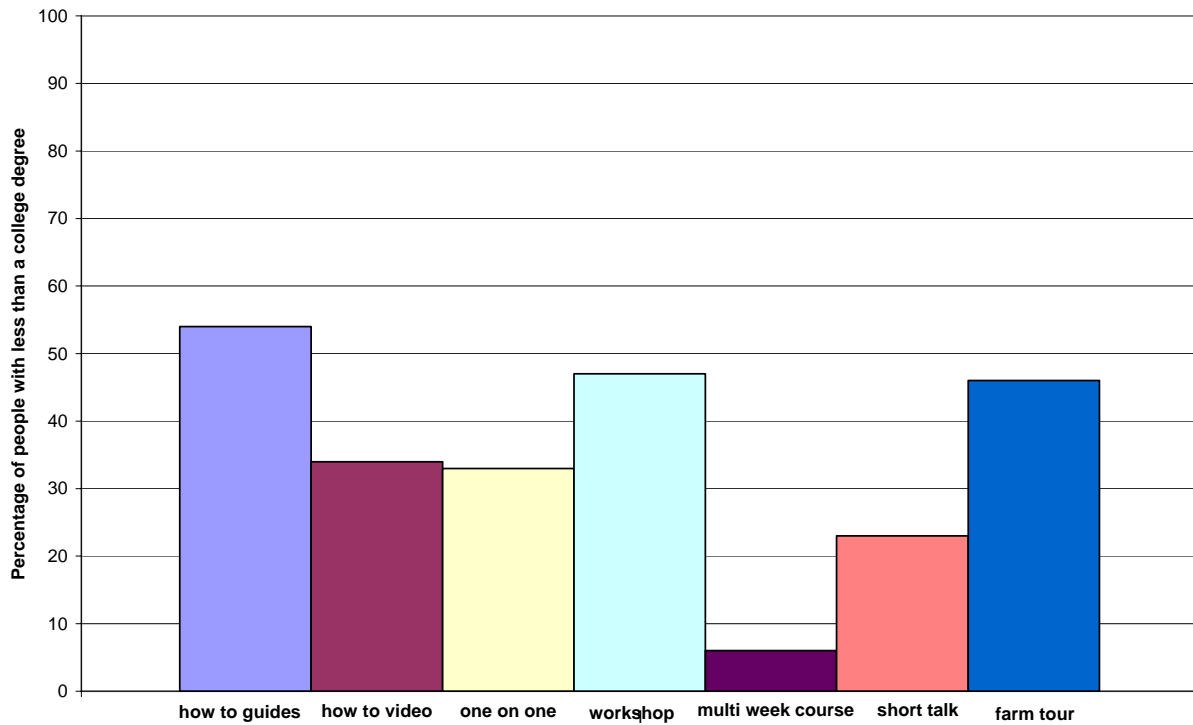
Preferred ways to learn new info: college



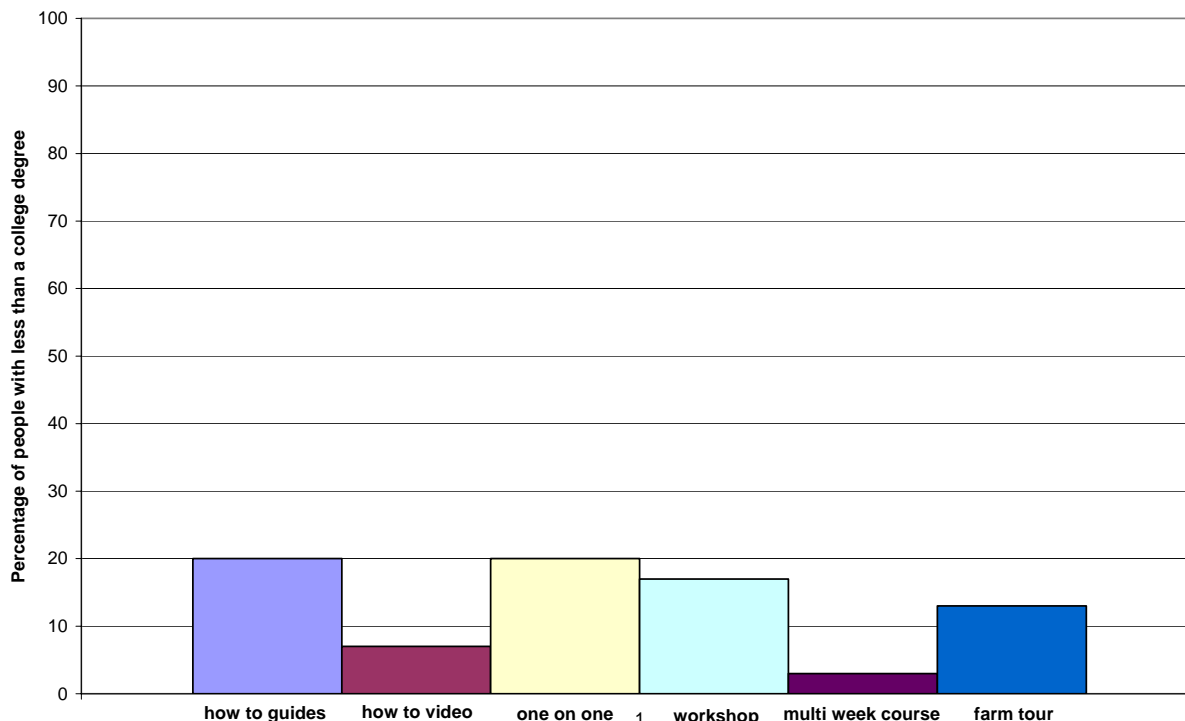
**Chosen as #1 preferred ways to learn new info: college**



**Preferred ways to learn new info: less than college**



**Chosen as #1 preferred ways to learn new info: less than college**



**Section II**

Below is a list of statements describing animal management topics. Please indicate whether you **Disagree (1)** or **Agree (2)** or **Don't Know (DK)** by circling your response.

	<b>Disagree</b>	<b>Agree</b>	<b>Don't Know</b>
<b>Bold number is the correct response.</b>			
<b>C responses are listed first</b>			
<b>L responses are listed second</b>			
<b>Manure Management</b>			
13. A good way to store and dispose of animal manure that is collected from the barn and yards is to pile it on the ground and let it decompose naturally.	<b>1</b> 25%	2 47%	DK 16%
	<b>23%</b>	55%	16%
14. Flies, odor and convenience are the most important things to consider when locating a place to store manure.	<b>1</b> 44%	2 44%	DK 6%
	<b>35%</b>	58%	0%
15. Animal manure contains bacteria and other things (viruses, parasites and other microbes) that can cause illness.	1 0%	<b>2</b> 94%	DK 0%
	3%	<b>74%</b>	13%

	Disagree	Agree	Don't Know
<b>Bold number is the correct response.</b>			
<b>C responses are listed first</b>			
<b>L responses are listed second</b>			
16. Animal manure contains nutrients such as nitrogen, phosphorus and potassium.	1 0%	<b>2</b> <b>88%</b>	DK 6%
	0%	<b>71%</b>	23%
17. Animal manure is a valuable source of organic matter and natural fertilizer for fields and crops.	1 0%	<b>2</b> <b>94%</b>	DK 0%
	3%	<b>87%</b>	3%
18. It does not matter how much manure is applied to the land.	<b>1</b> <b>81%</b>	2 0%	DK 13%
	<b>74%</b>	6%	13%
19. It is important to consider the time of year when applying manure to the land.	1 13%	<b>2</b> <b>72%</b>	DK 9%
	3%	<b>77%</b>	13%
20. Human health risks associated with animal manure can only occur through direct contact.	<b>1</b> <b>75%</b>	2 9%	DK 9%
	<b>55%</b>	13%	26%
21. Animals can develop health problems when subjected to areas of concentrated animal waste.	1 3%	<b>2</b> <b>91%</b>	DK 0%
	0%	<b>81%</b>	13%
<b>Animal Management</b>			
22. One <b>animal unit</b> is equal to 1,000 pounds of live animal weight.	1 6%	<b>2</b> <b>9%</b>	DK 78%
	0%	<b>19%</b>	68%
23. Animal yards (outdoor pens, corrals, exercise areas, etc.) should be sized based on the number and type of animals occupying them.	1 3%	<b>2</b> <b>84%</b>	DK 6%
	0%	<b>90%</b>	3%

	<b>Disagree</b>	<b>Agree</b>	<b>Don't Know</b>
<b>Bold number is the correct response.</b> <b>C responses are listed first</b> <b>L responses are listed second</b>			
24. Easy access to food, shelter and water are the most important things to consider when locating an animal yard.	<b>1</b> 22%	2 66%	DK 6%
	23%	61%	6%
25. There is a difference between a properly managed animal yard and a properly managed pasture.	1 3%	<b>2</b> <b>72%</b>	DK 19%
	10%	<b>65%</b>	13%
26. For grazing animals such as cows, sheep, etc., properly managed pastures can provide valuable feed, reducing hay and grain costs.	1 0%	<b>2</b> <b>91%</b>	DK 3%
	3%	<b>81%</b>	10%
<b>Land and Water Resources</b>			
27. One to two acres of land are needed to support one <b>animal unit</b> .	1 9%	<b>2</b> <b>44%</b>	DK 41%
	10%	<b>42%</b>	39%
28. The type of soils on a given property can be different and affect its suitability for different land uses accordingly.	1 3%	<b>2</b> <b>84%</b>	DK 3%
	3%	<b>71%</b>	16%
29. Groundwater and surface water are inter-connected. If one water resource becomes polluted, it can affect the other water resource.	1 0%	<b>2</b> <b>75%</b>	DK 19%
	13%	<b>65%</b>	16%
30. Nitrogen and phosphorus are potential sources of water pollution.	1 0%	<b>2</b> <b>78%</b>	DK 16%
	10%	<b>42%</b>	42%
31. The only way a surface water body can be impacted by animal manure is when animals have direct access to the water body.	<b>1</b> <b>81%</b>	2 3%	DK 9%
	<b>71%</b>	6%	16%

**Bold number is the correct response.  
C responses are listed first  
L responses are listed second**

	<b>Disagree</b>	<b>Agree</b>	<b>Don't Know</b>
32. When animals have direct and unrestricted access to a surface water body, the only chance of pollution is through direct deposit of manure and urine.	<b>1</b> 75%	2 3%	DK 16%
	45%	10%	39%
33. An animal yard or manure storage area should be at least 100 feet away from a drinking water well.	1 0%	<b>2</b> 59%	DK 31%
	3%	<b>68%</b>	23%

### Section III

34. I believe proper manure and animal yard management is important for the following reasons:

C:

- 87% to protect animals' general health
- 55% to improve animals' performance
- 87% to control odor and flies
- 79% to improve the appearance of my property
- 67% to be a good neighbor
- 86% to protect the quality of my drinking water
- 82% to protect the surrounding environment

Selected as #1 choices:

- 27% to protect the animals' general health
- 11% to improve animals' performance
- 59% to protect the quality of my drinking water
- 9% to protect the surrounding environment

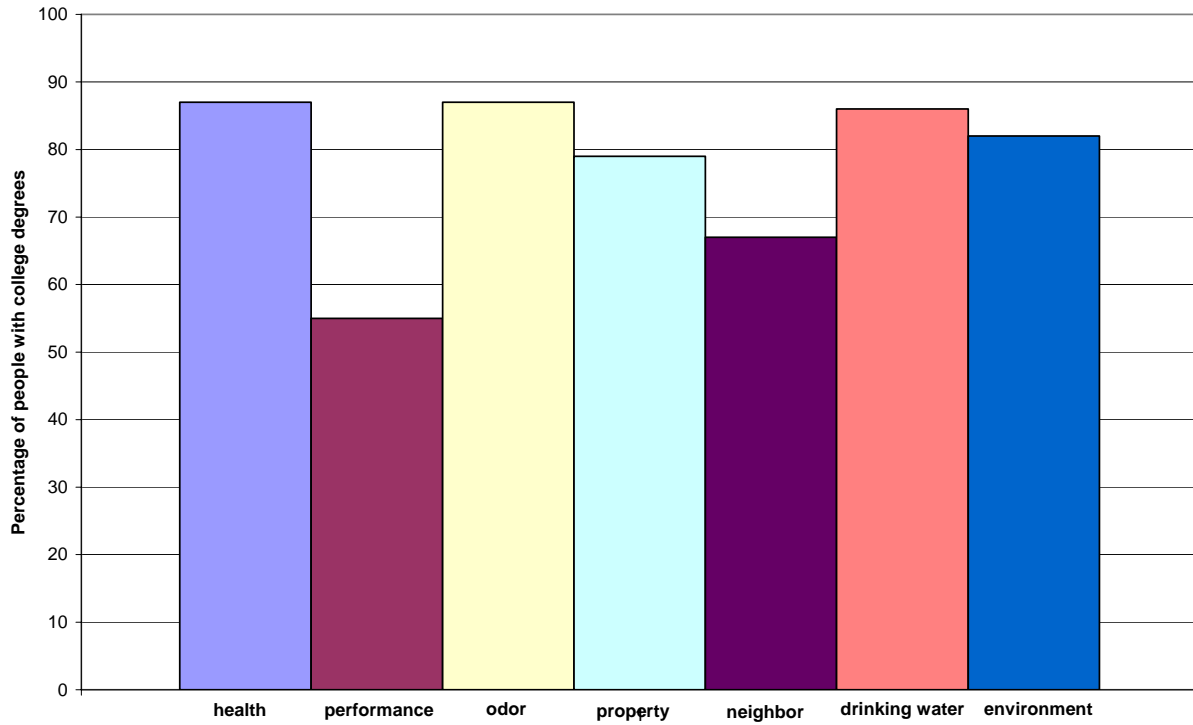
L:

- 76% to protect animals' general health
- 45% to improve animals' performance
- 76% to control odor and flies
- 64% to improve the appearance of my property
- 65% to be a good neighbor
- 75% to protect the quality of my drinking water
- 71% to protect the surrounding environment

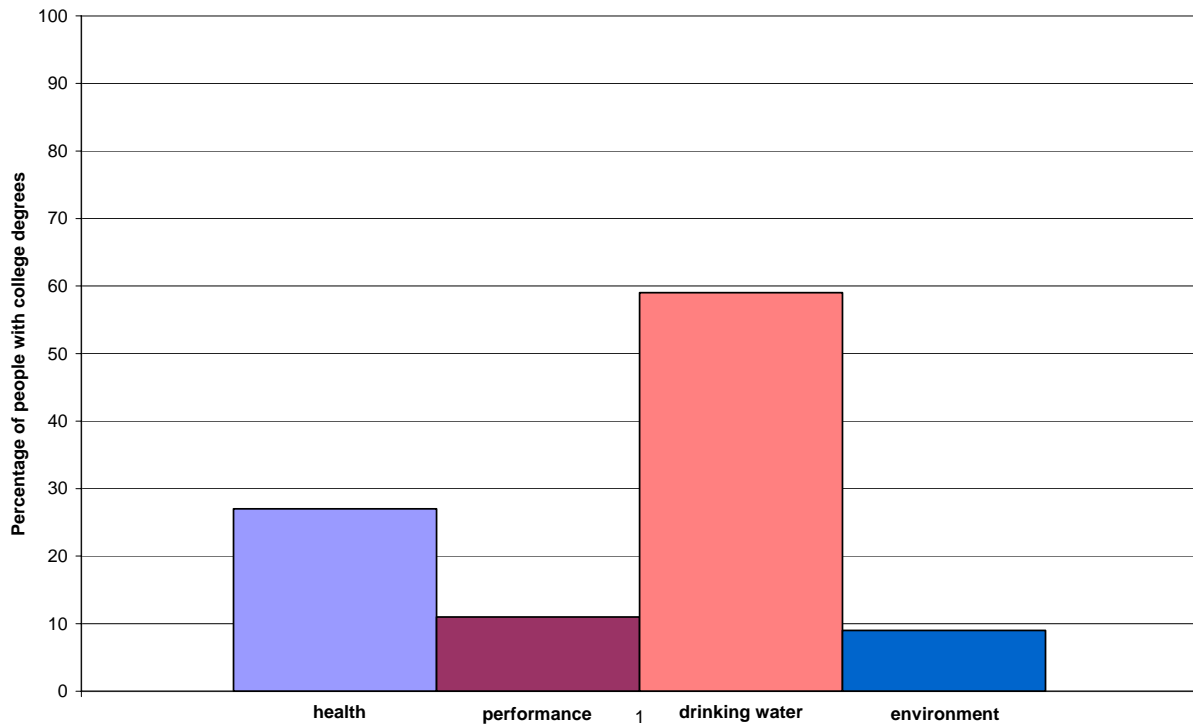
Selected as #1 choices:

- 40% to improve animals' general health
- 34% to protect the quality of my drinking water
- 4% to protect the surrounding environment

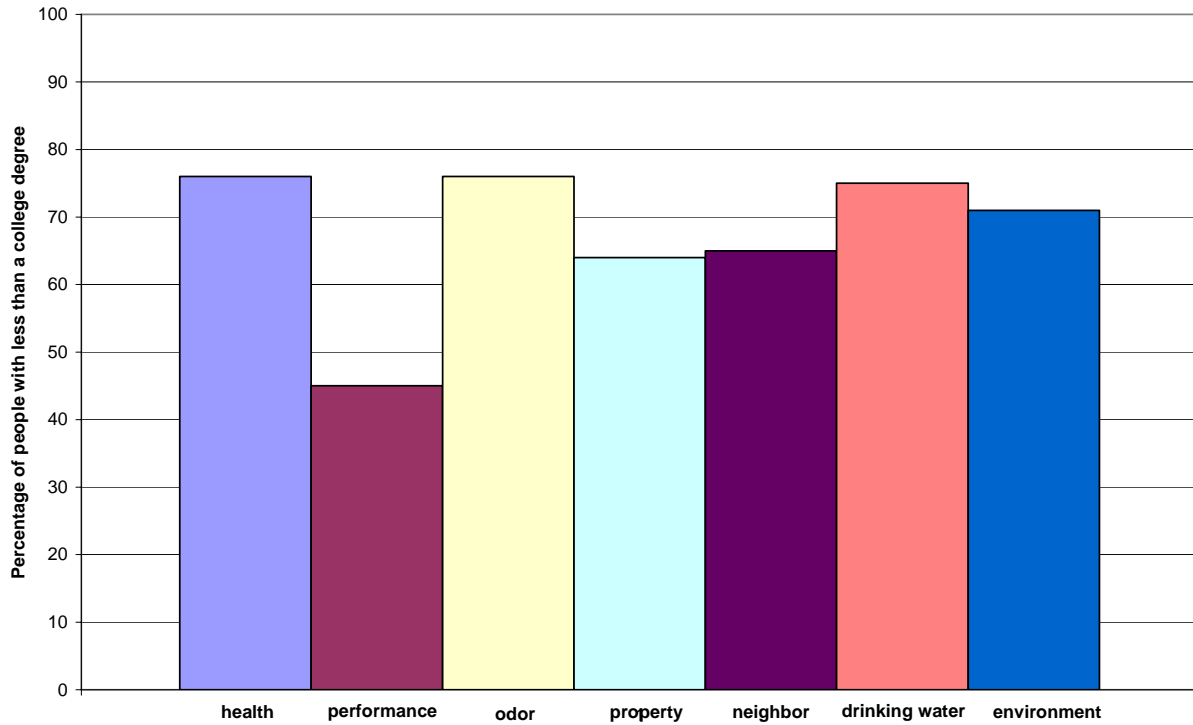
Reasons why manure management is important: college



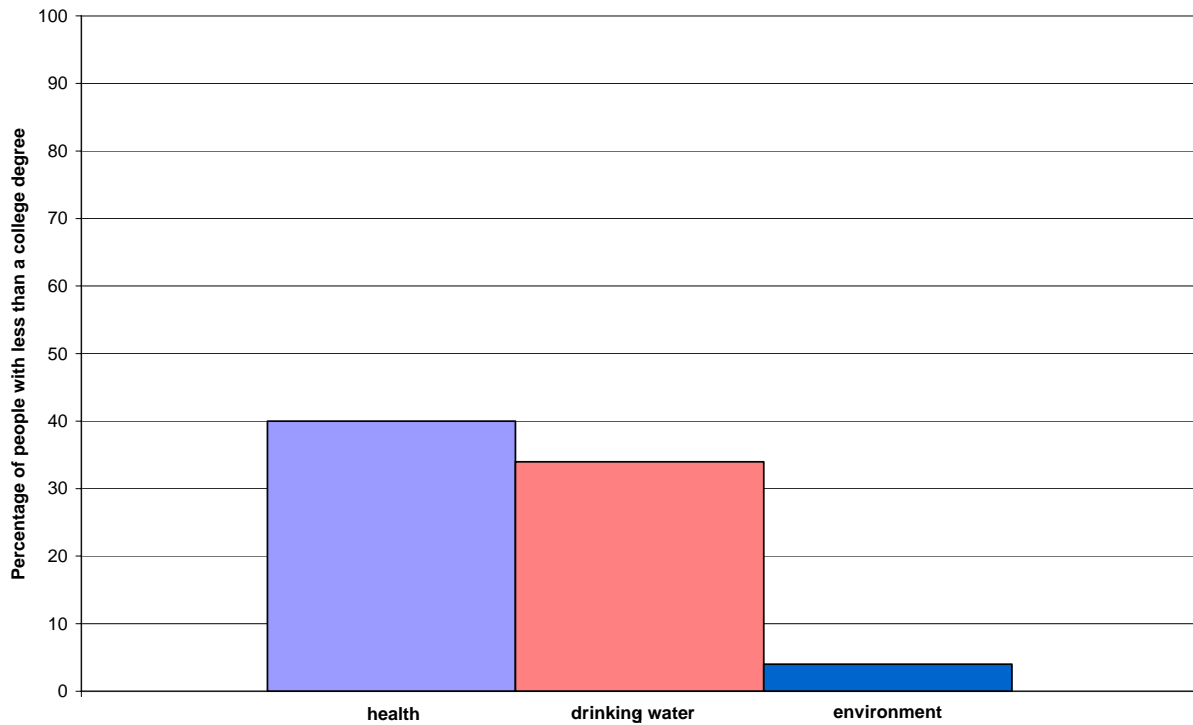
#1 Reason why manure management is important: college



Reasons why manure management is important: less than college



#1 Reasons why manure management is important: less than college



35. Choose the **one** main factor that limits you from making improvements with manure and animal yard management. Mark an “X” next to the one main factor:

C: 31% knowledge; followed by 13% who indicated time and 13% do not feel there are any factors limiting management.

L: 26% do not feel there are any factors limiting management followed by 16% money.

36. How do the following factors affect your ability to make improvements with manure and animal yard management? Circle the appropriate number for each factor.

Percent of people who chose 1 or 2- it affected them a lot:

C:	L:
Cost: 38%	Cost: 45%
Easy to do: 12%	Easy to do: 16%
Time: 32%	Time: 51%
Labor: 25%	Labor: 36%
Equipment: 47%	Equipment: 45%
Land: 22%	Land: 36%

Please indicate how likely you are to do the following practices. Please circle the appropriate response on a scale of 1 through 5.

**1 - Very Likely, 2 – Somewhat Likely, 3 - Not Sure, 4 – Unlikely, 5 - Definitely Not** or indicate **Does Not Apply – NA** if the practice is not applicable to your situation.

	<b>C responses listed first</b>					
	<b>L responses listed second</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
37. Move a manure pile to another location on my property to reduce a possible threat to a drinking water well or other water resource.	<b>69%</b>	<b>9%</b>	<b>6%</b>	<b>3%</b>	<b>0%</b>	<b>6%</b>
	<b>42%</b>	<b>10%</b>	<b>6%</b>	<b>13%</b>	<b>6%</b>	<b>10%</b>
38. Cover a manure pile and/or line the bottom of it with a tarp or plastic liner, or organic materials such as wood chips and leaves.	<b>47%</b>	<b>19%</b>	<b>13%</b>	<b>9%</b>	<b>0%</b>	<b>6%</b>
	<b>26%</b>	<b>26%</b>	<b>6%</b>	<b>10%</b>	<b>13%</b>	<b>6%</b>
39. Store manure under a roofed area – does not need to be enclosed.	<b>6%</b>	<b>6%</b>	<b>16%</b>	<b>38%</b>	<b>9%</b>	<b>19%</b>
	<b>10%</b>	<b>3%</b>	<b>23%</b>	<b>10%</b>	<b>35%</b>	<b>10%</b>
40. Actively compost the manure.	<b>56%</b>	<b>19%</b>	<b>6%</b>	<b>3%</b>	<b>0%</b>	<b>9%</b>
	<b>35%</b>	<b>19%</b>	<b>23%</b>	<b>6%</b>	<b>0%</b>	<b>6%</b>

41. Install a concrete pad/floor with walls or other storage structure to contain the manure.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>16%</b>	<b>16%</b>	<b>3%</b>	<b>9%</b>	<b>34%</b>	<b>16%</b>
	<b>10%</b>	<b>6%</b>	<b>19%</b>	<b>16%</b>	<b>29%</b>	<b>10%</b>
42. Improve how manure is spread on my own land – based on soil tests, proper timing, etc.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>34%</b>	<b>31%</b>	<b>16%</b>	<b>3%</b>	<b>0%</b>	<b>9%</b>
	<b>13%</b>	<b>29%</b>	<b>10%</b>	<b>10%</b>	<b>10%</b>	<b>19%</b>
43. Pay to have manure hauled away to a place where it can be safely recycled or composted.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>13%</b>	<b>6%</b>	<b>13%</b>	<b>13%</b>	<b>34%</b>	<b>16%</b>
	<b>3%</b>	<b>3%</b>	<b>6%</b>	<b>35%</b>	<b>32%</b>	<b>10%</b>
44. Install roof gutters to direct roof water away from manure storage areas and animal yards.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>9%</b>	<b>9%</b>	<b>16%</b>	<b>9%</b>	<b>9%</b>	<b>41%</b>
	<b>13%</b>	<b>16%</b>	<b>10%</b>	<b>13%</b>	<b>16%</b>	<b>23%</b>
45. Install fencing to subdivide animal yard(s) and rotate the animals through different paddocks.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>22%</b>	<b>19%</b>	<b>16%</b>	<b>6%</b>	<b>6%</b>	<b>25%</b>
	<b>23%</b>	<b>6%</b>	<b>16%</b>	<b>13%</b>	<b>13%</b>	<b>19%</b>
46. Restrict the animals from having access to a drinking water well or water body.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>31%</b>	<b>19%</b>	<b>9%</b>	<b>0%</b>	<b>3%</b>	<b>31%</b>
	<b>16%</b>	<b>6%</b>	<b>10%</b>	<b>10%</b>	<b>16%</b>	<b>32%</b>
47. Install a roof over part or all of the animal yard.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>25%</b>	<b>16%</b>	<b>13%</b>	<b>6%</b>	<b>13%</b>	<b>22%</b>
	<b>16%</b>	<b>3%</b>	<b>6%</b>	<b>26%</b>	<b>19%</b>	<b>19%</b>
48. Install a concrete pad or geo-textile material in part or all of the animal yard to improve muddy areas.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>19%</b>	<b>3%</b>	<b>25%</b>	<b>16%</b>	<b>9%</b>	<b>22%</b>
	<b>13%</b>	<b>6%</b>	<b>16%</b>	<b>19%</b>	<b>23%</b>	<b>13%</b>
49. Find additional land nearby to periodically rotate the animals through – especially during the growing season.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>NA</b>
	<b>16%</b>	<b>16%</b>	<b>16%</b>	<b>13%</b>	<b>13%</b>	<b>22%</b>
	<b>6%</b>	<b>13%</b>	<b>13%</b>	<b>23%</b>	<b>23%</b>	<b>13%</b>

**Section IV**

Below is a list of statements describing potential motivations for improving manure and animal yard management. Please indicate whether you **Disagree (1)** or **Agree (2)** or are **Not Sure (NS)** by circling your response.

	<b>Disagree</b>	<b>Agree</b>	<b>Not Sure</b>
	<b>1</b>	<b>2</b>	<b>NS</b>
<b>C responses listed first</b>			
<b>L responses listed second</b>			
51. I would make improvements if government assistance was available to provide free technical and financial assistance.	6%	75%	13%
	3%	48%	35%
52. I would make improvements if reputable private consultants and service providers were available for hire to provide technical assistance and services as needed.	22%	34%	38%
	13%	26%	48%
53. I would make improvements if my community and/or animal club/organization provided recognition and awards for good stewardship such as “Green Pastures Award” or “Healthy Landscapes Award”, etc.	25%	38%	31%
	19%	23%	45%
54. I would make improvements if featured in a newspaper/magazine article, TV program segment, website, etc. for good stewardship.	28%	28%	38%
	32%	16%	39%
55. I would make improvements if my peers/fellow animal owners were also making improvements.	38%	28%	28%
	26%	26%	35%
56. I would make improvements if I was reminded that I needed to do so.	25%	56%	13%
	32%	29%	23%
57. I would make improvements to demonstrate good will in my neighborhood and be considered a good neighbor.	3%	81%	9%
	13%	61%	13%