

Surveys summarized by livestock type. 63 adults and 28 youth (where applicable) responses, total of 91 surveys

M = Mixed Livestock (61 responses or 67%)

E = Equine only (20 responses or 22%)

P = Poultry only (10 responses or 11%)

1. Age:

M: 43% 40-49

E: 35% 50-59, 25% 40-49, 25% 16-18.

P: 50% 40-49

2. Gender:

M: 70% F, 23% M

E: 80% F, 10% M

P: 70% F, 30% M

3. Combined Household Income:

M: 47% 80000+, 14% 70-79999.

E: 43% 80000+, 29% 50000-59999.

P: 84% 80000+

4. Last Educational Level Completed:

M: 52% college and post grad

E: 50% college and post grad, 36% some college

P: 50% college and post grad, 33% associate degree

5. Total property acreage:

M: 51% 1-5 acres

E: 64% 1-5 acres

P: 33% each: <1, 1-5, and 5-10 acres

6. My property is located in:

M: 37% Washington, 35% Kent.

E: 64% Washington

P: 67% Washington

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

M:

Horses: 33%

Ponies: 14%

Dairy cattle: 21%

Beef cattle: 14%

Pigs: 7%

Sheep: 12%

Goats: 33%

Chickens: 47%

Turkeys: 7%

E:

Horses: 93%

Ponies: 14%

Donkeys: 0%

P:

Chickens: 100%

Turkeys: 0%

Ducks: 17%

Other poultry/fowl: 0%

Ducks: 12%
Other poultry/fowl: 7%
Rabbits: 49%
Donkeys: 2%

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

M: 19 (1-55)
E: 23 (5-50)
P: 9.2 (2-15)

Number of hours per week spent caring for animals:

M: 15 (0-40)
E: 18 (6-60)
P: 3 (2-5)

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

M: 95% adults, 81% youth, 5% hired help, 9% other friends/family
E: 100% adults, 79% youth, 7% hired help, 7% other friends/family
P: 100% adults, 100% youth

9. Top reasons for owning/keeping animals:

M: 89% for pleasure & enjoyment
59% competition/ show
21% food/ fiber
58% teach children values/ responsibility
50% service/ education
11% property maintenance

Selected as #1 choice:

45% pleasure & enjoyment
11% competition/ show
3% food/ fiber
17% teach children values/ responsibility
5% service/ education

E: 95% for pleasure & enjoyment
48% competition/ show
0% food/ fiber
50% teach children values/ responsibility
64% service/ education
0% property maintenance
Other: retired animals

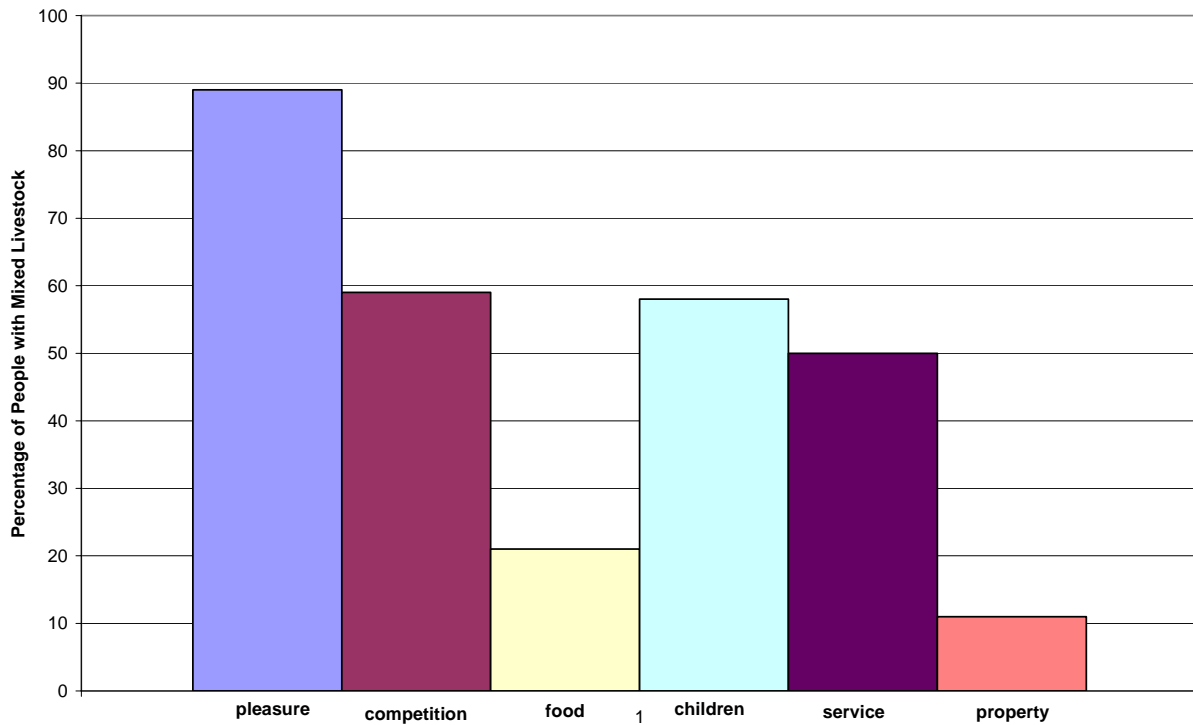
Selected as #1 choice:

59% pleasure & enjoyment
12% competition/ show
14% teach children values/ responsibility

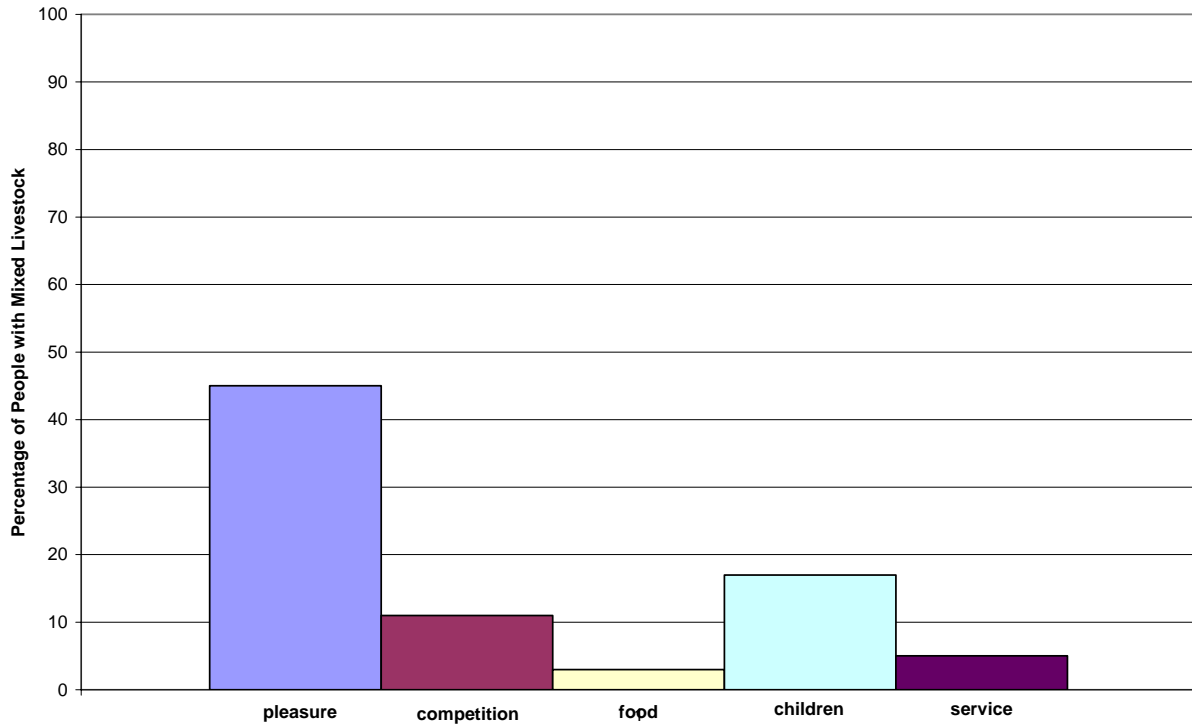
P: 91% pleasure & enjoyment
59% competition/ show
58% food/ fiber
100% teach children values/ responsibility
42% service/ education

Selected as #1 choices:
75% pleasure & enjoyment
14% teach children values/ responsibility

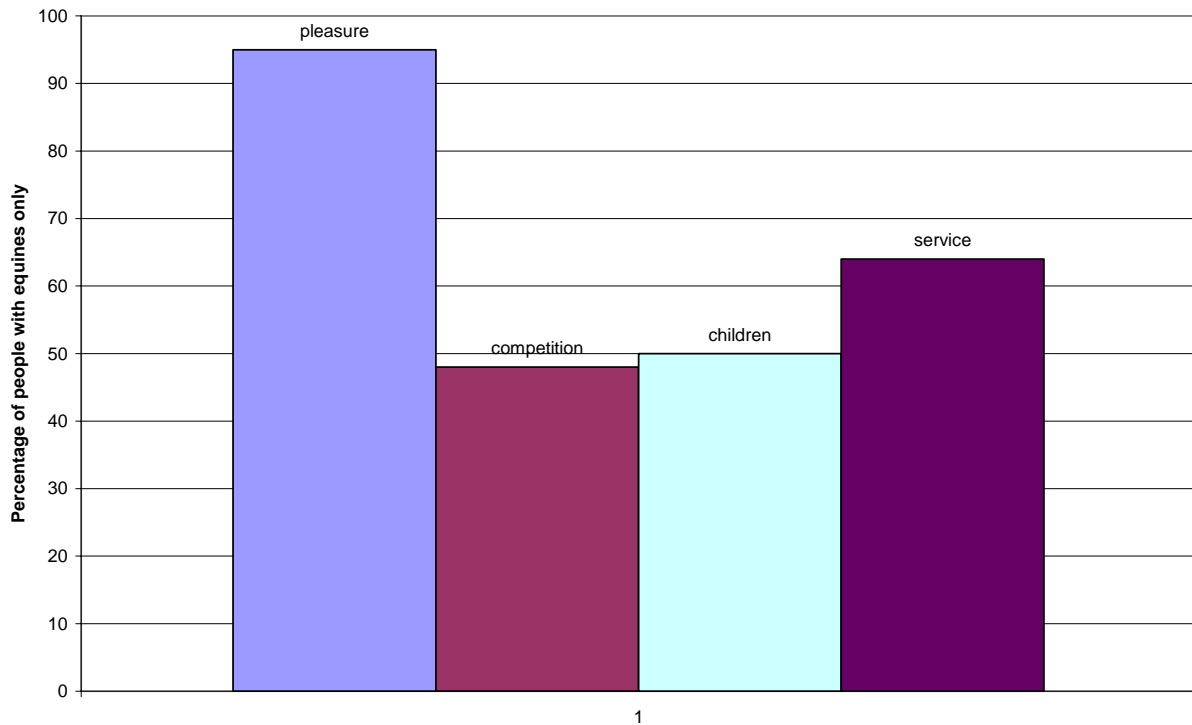
Selected as Reasons for Owning Animals: Mixed Livestock



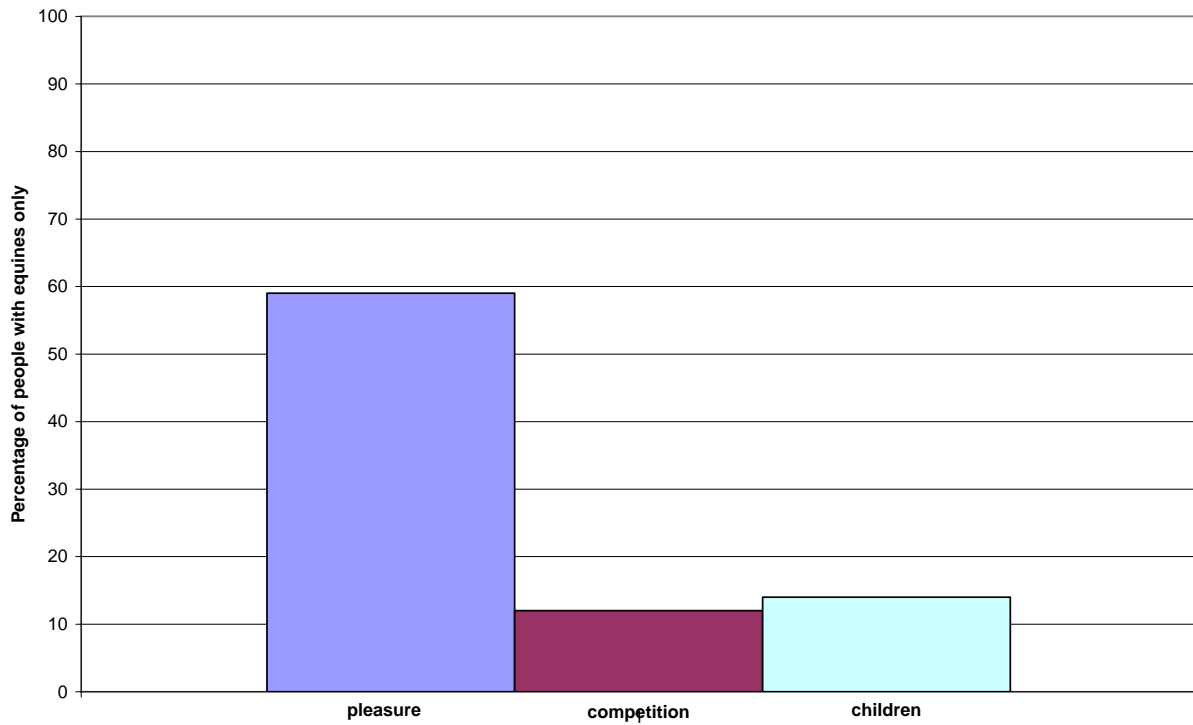
#1 Reasons for Owning Animals: Mixed Livestock



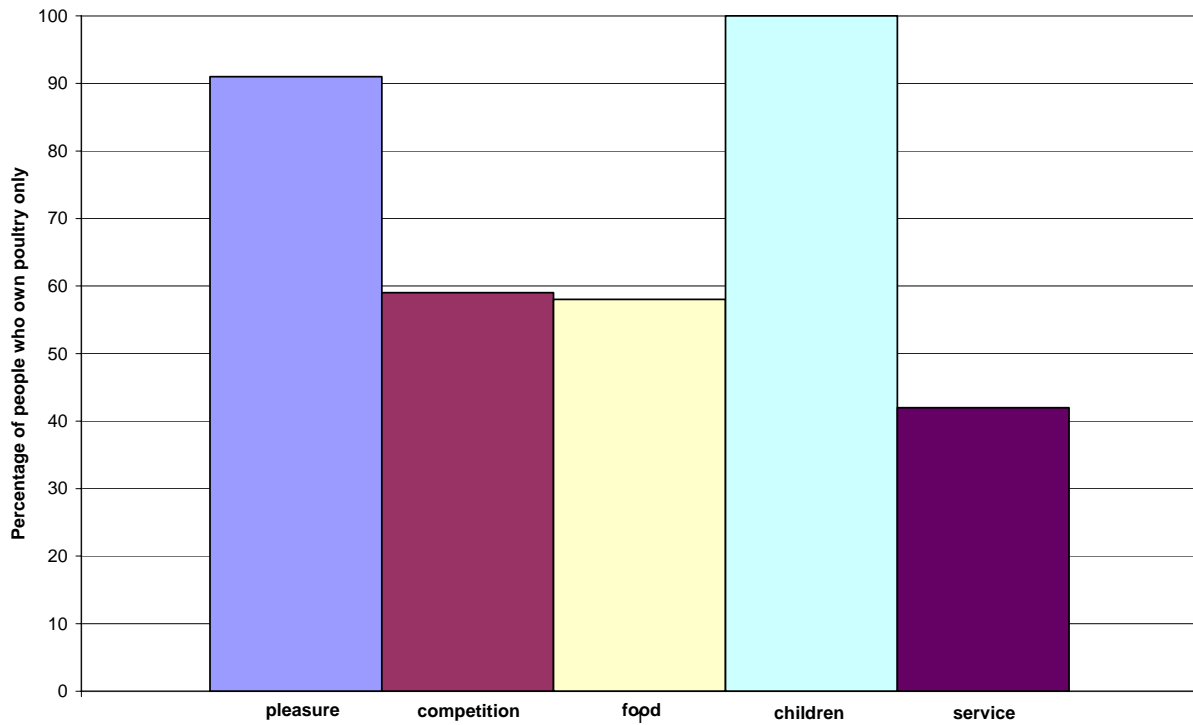
Top reasons for owning animals: Equines



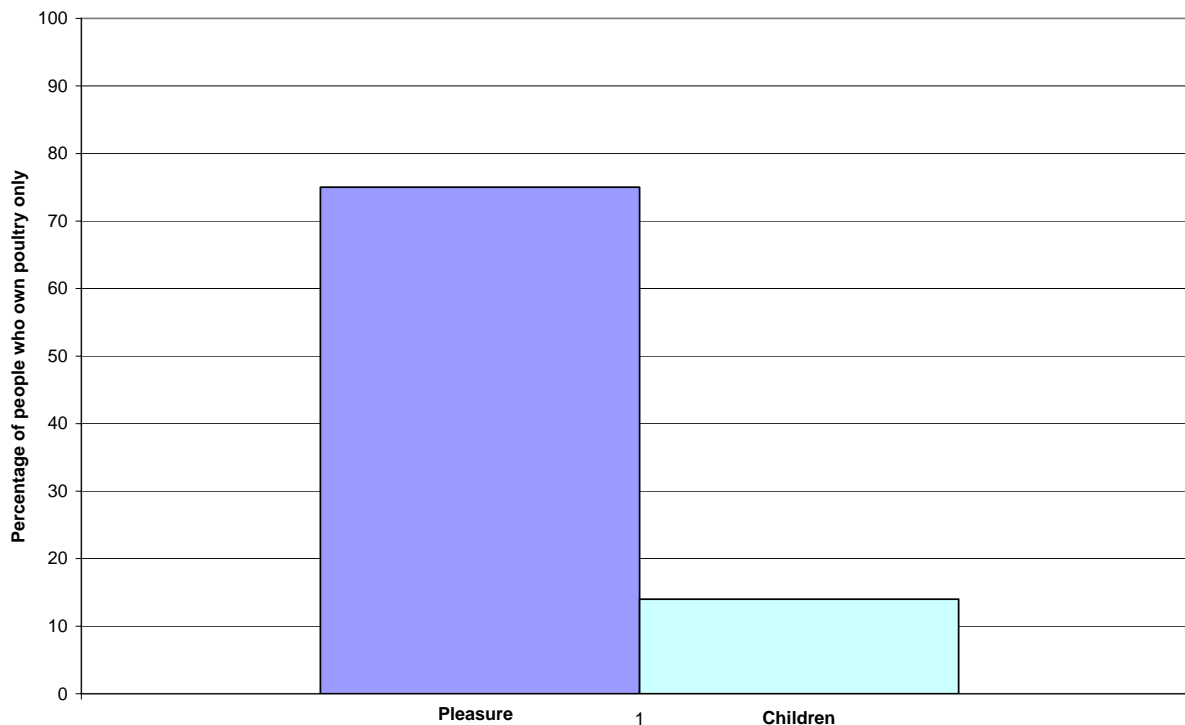
#1 Reasons for Owning Animals: Equines



Top reasons for owning animals: Poultry



#1 Reasons for owning animals: Poultry



10. I have the following on my property: Please check all that apply.

M: 88% private well, 86% septic system, 47% pond etc., 74% veg garden, 64% flower garden
77% barnyard (mean 1.7 acres), 37% pasture (mean 3.5 acres), 5% hay field (mean 4 acres),
7% other crop field (mean 0.33 acre), 56% woodlands (mean 7.1 acres), 23% other open
space (mean 3.5 acres).

E: 79% private well, 93% septic system, 38% pond etc., 29% veg garden, 50% flower garden
79% barnyard (mean 1.7 acres), 57% pasture (mean 1.6 acres), 50% woodlands (mean 8.7
acres), 14% other open space (mean 0.375 acre).

P: 50% private well, 50% septic system, 33% pond et., 50% veg garden, 67% flower garden
67% barnyard (mean 0.4 acre), 17% pasture (mean 1.75 acre), 33% woodlands (mean 3.75
acres), 33% other open space (mean 1.5 acres).

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

M:
71% farmers/ exp. Owners
61% veterinarian
27% animal professionals
52% family/ friends
6% university/ extension
5% state/ federal govt
47% animal association
30% feed/ supply stores

E:
77% farmers/ exp. owners
89% veterinarian
70% animal professionals
42% family and friends
0% university/ extension
6% state/ federal govt
30% animal association
40% feed/ supply stores

P:
60% farmers/exp.own.
20% veterinarian
10% animal prof.
40% family/friends
10% university
10% state/ federal govt.
20% animal assoc.
30% feed/ supply stores

48% internet
 51% books
 28% magazines

48% internet
 24% books
 18% magazines

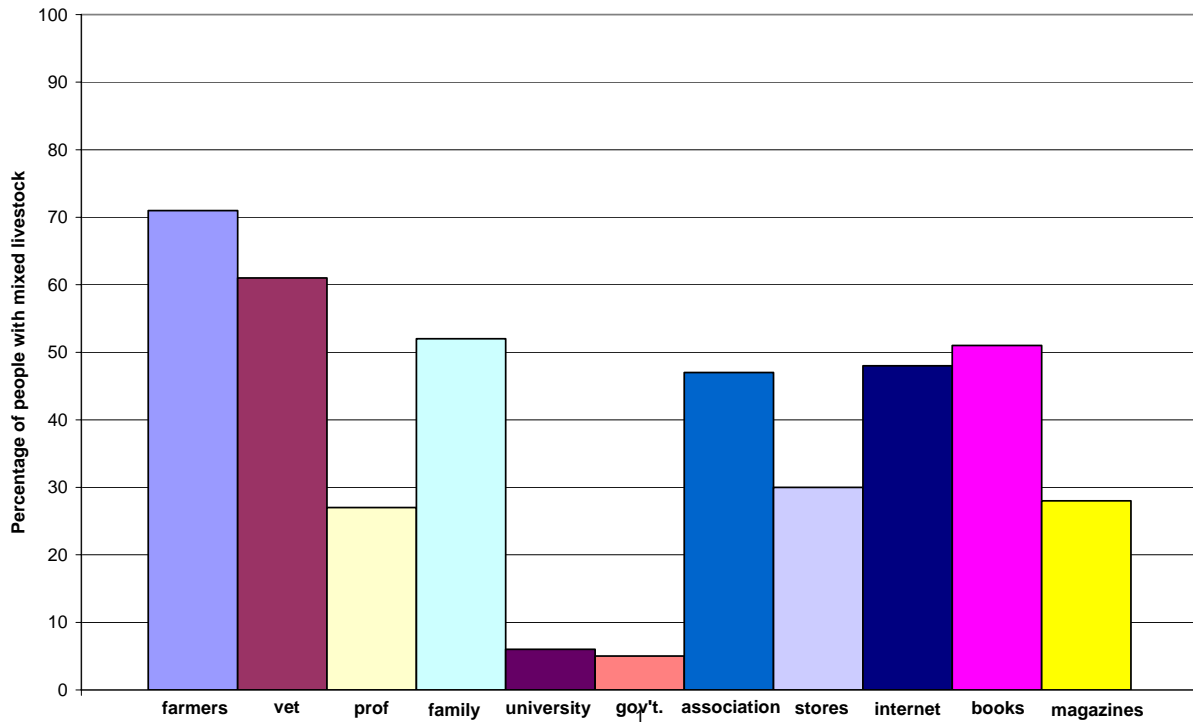
40% internet
 40% books
 10% magazines

M:
 Selected as #1 choices:
 31% farmers/ exp. Owners
 11% veterinarian
 5% animal professionals
 17% family and friends
 5% animal association
 2% feed/ supply stores
 9% internet
 2% books

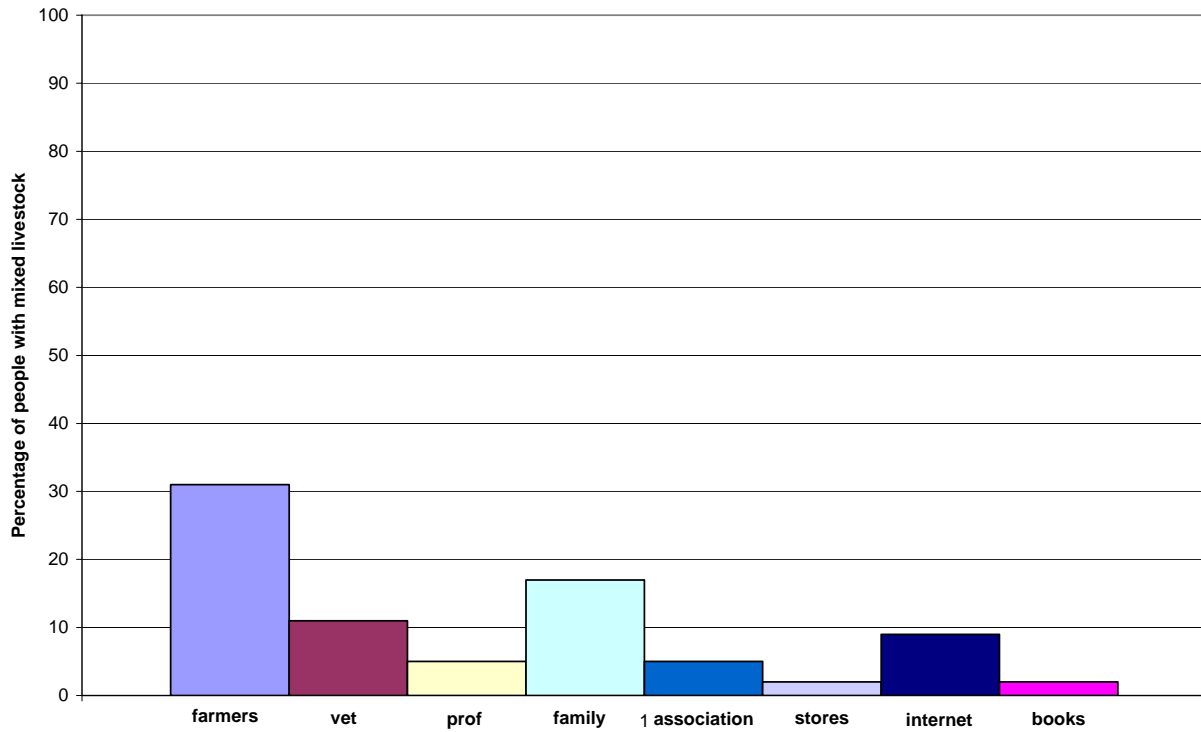
E:
 Selected as #1 choices:
 29% farmers/ experienced owners
 24% veterinarian
 12% animal professionals
 6% animal association
 6% books

P:
 Selected as #1 choices:
 40% farmers/ exp.own.
 20% books

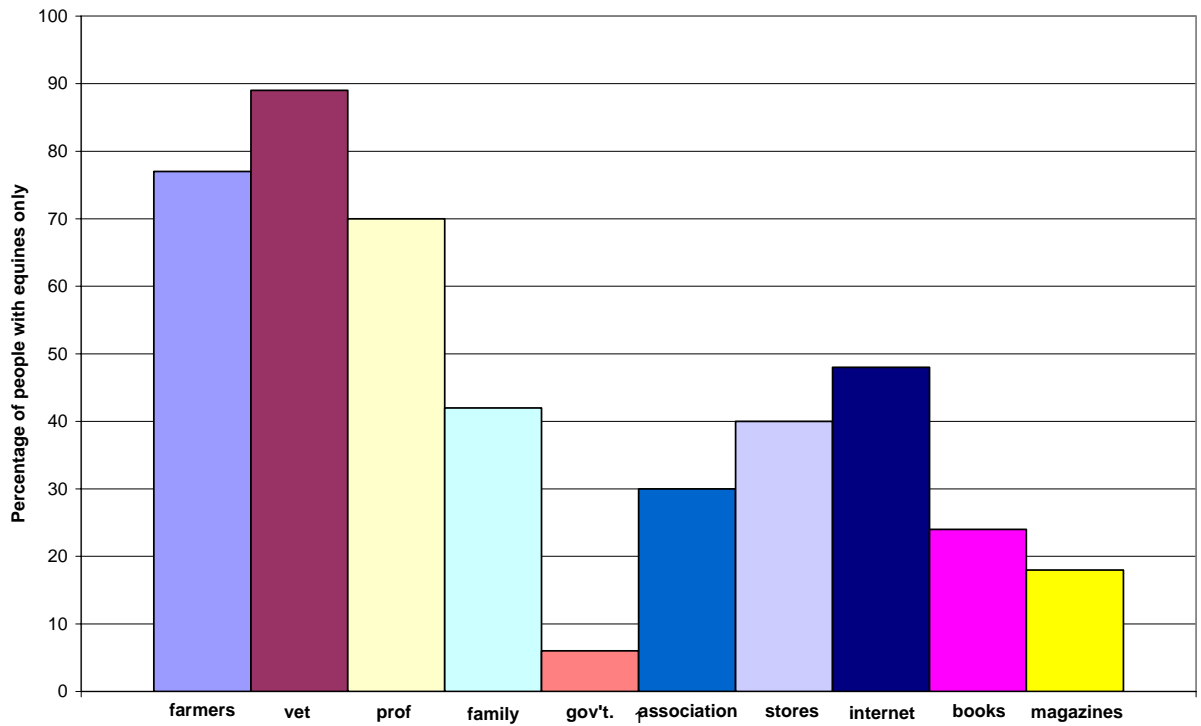
Selected as Source of Info Relied on Most: Mixed Livestock



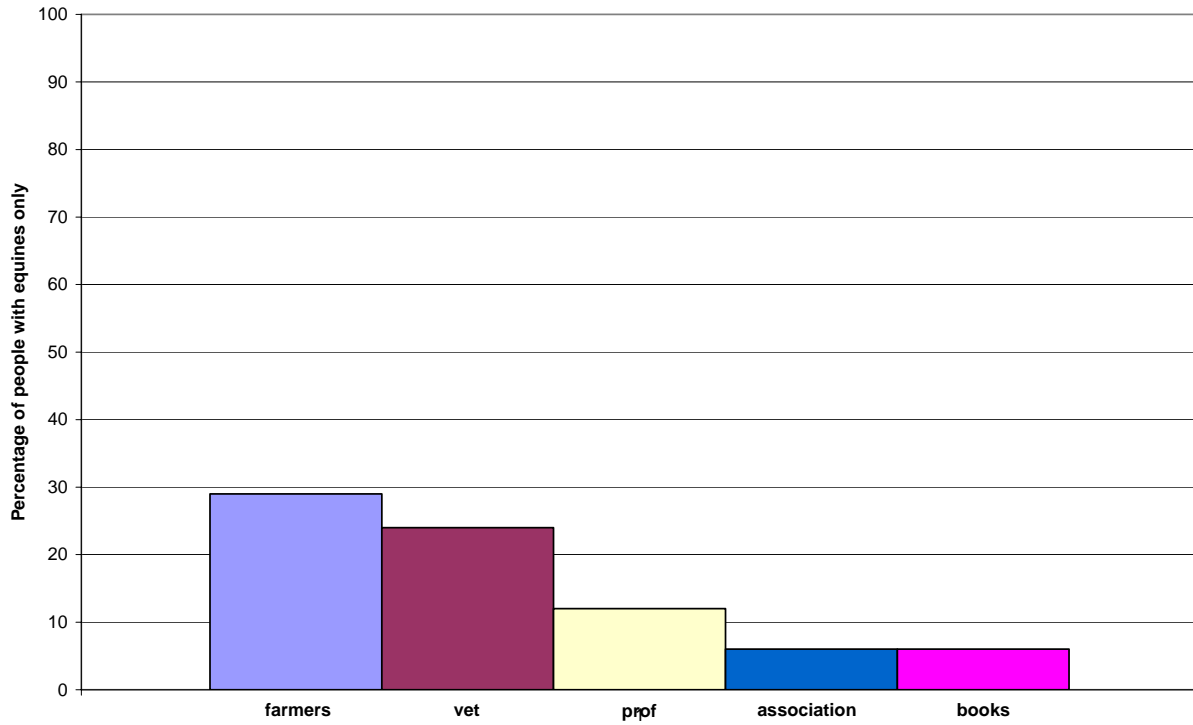
#1 Sources relied on most: Mixed livestock



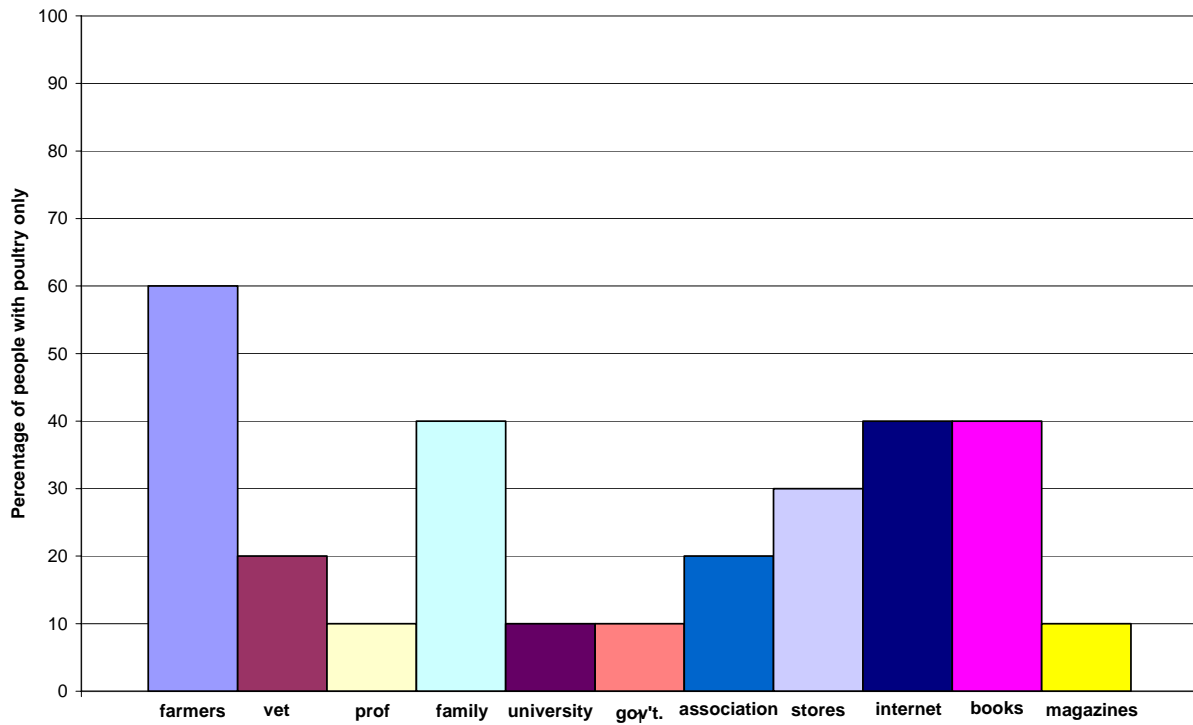
Selected as sources relied on most: Equines only



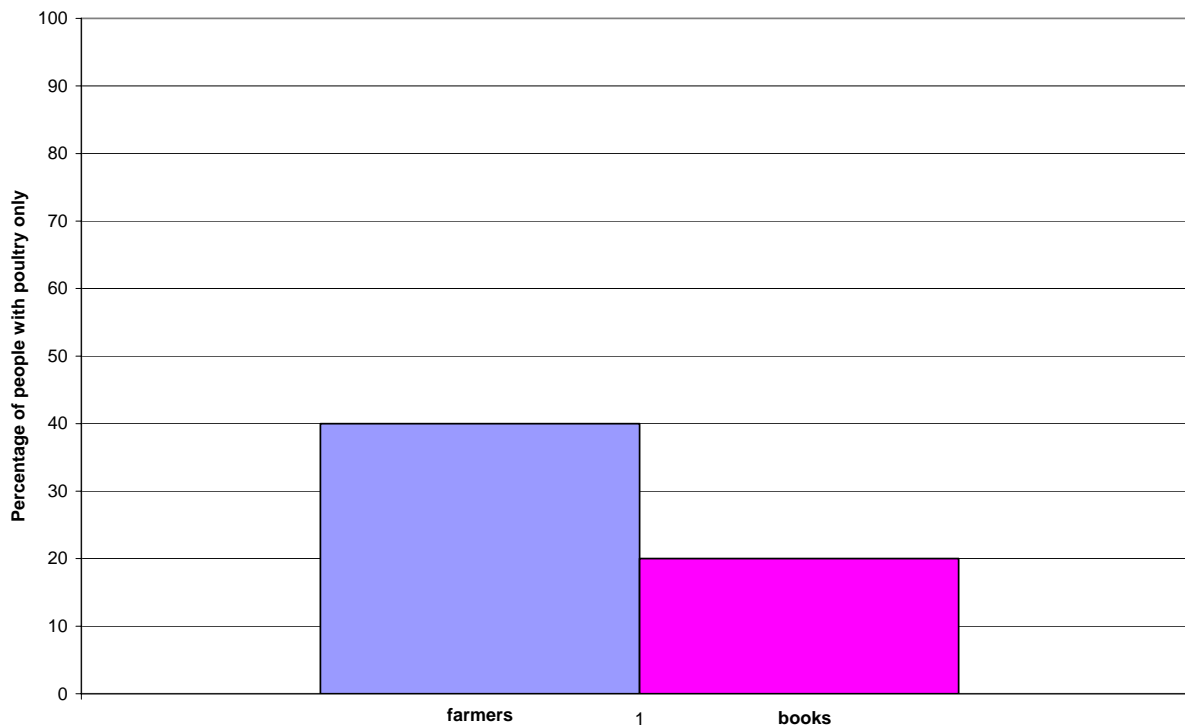
#1 Sources relied on most: Equines



Selected as sources relied on most: Poultry



#1 Sources of info relied on most: poultry



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

M:

- 45% how to guides
- 25% how to video/ DVD
- 39% one-on-one
- 69% hands-on workshop
- 11% multi-week course
- 26% short indoor talk/sem.
- 41% farm tour
- other: 2 people internet

Selected as #1 choices:

- 14% how to guides
- 22% one-on-one
- 27% hands-on workshop

E:

- 48% how to guides
- 41% how to video/ DVD
- 36% one-on-one
- 35% hands-on workshop
- 18% multi-week course
- 30% short indoor talk/ sem.
- 12% farm tour
- other: 1 person weekly lessons

Selected as #1 choices:

- 24% how to guides
- 18% one-on-one
- 29% hands-on workshop

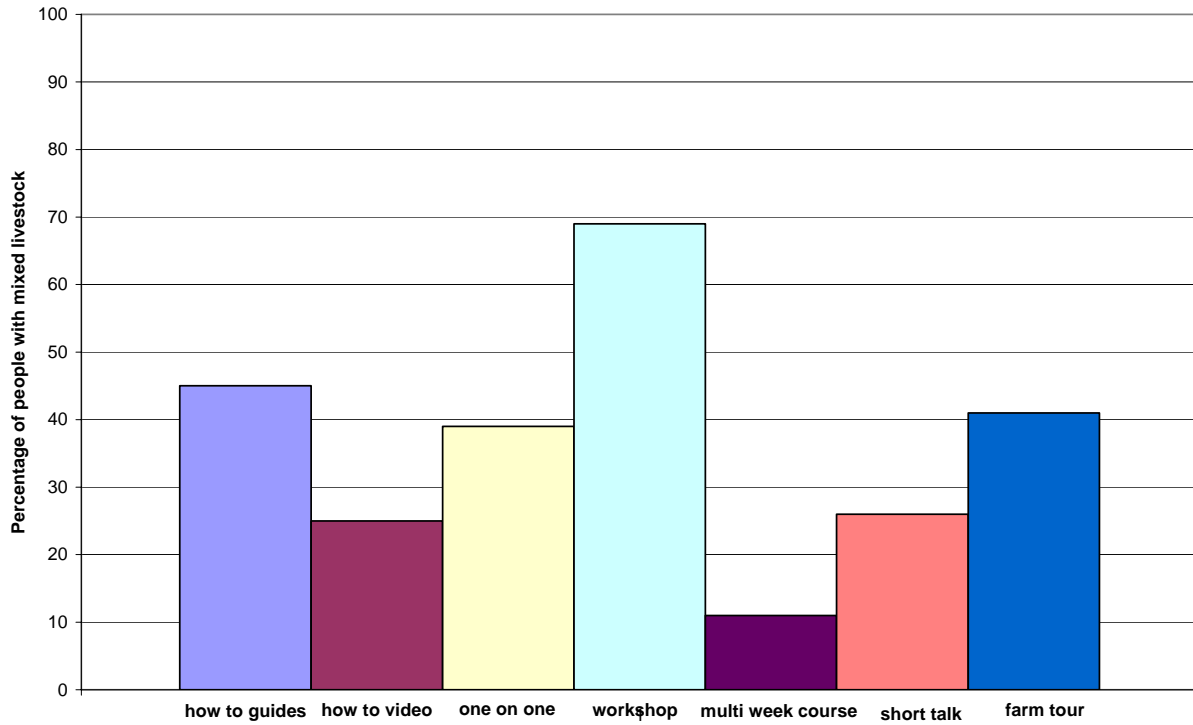
P:

- 75% how to guides
- 8% how to video/ DVD
- 41% one-on-one
- 59% hands-on workshop
- 8% multi week course
- 8% short indoor talk/ sem.
- 66% farm tour

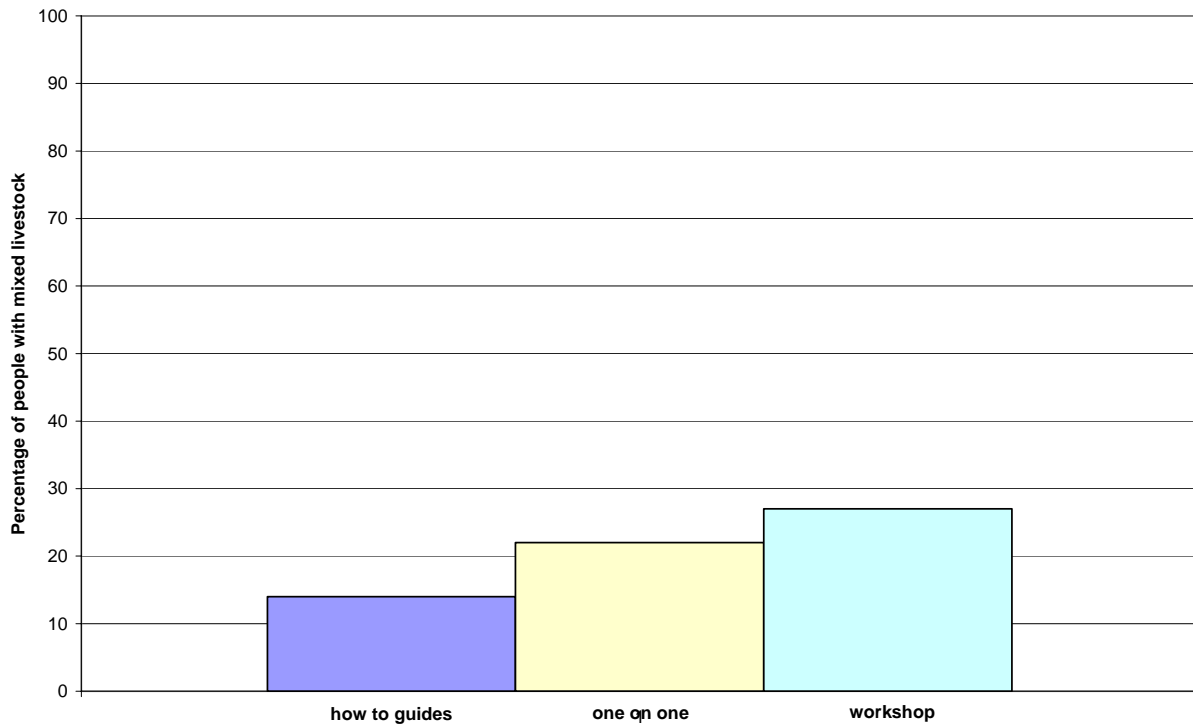
Selected as #1 choices:

- 33% one-on-one
- 42% hands-on workshop
- 8% how to guides

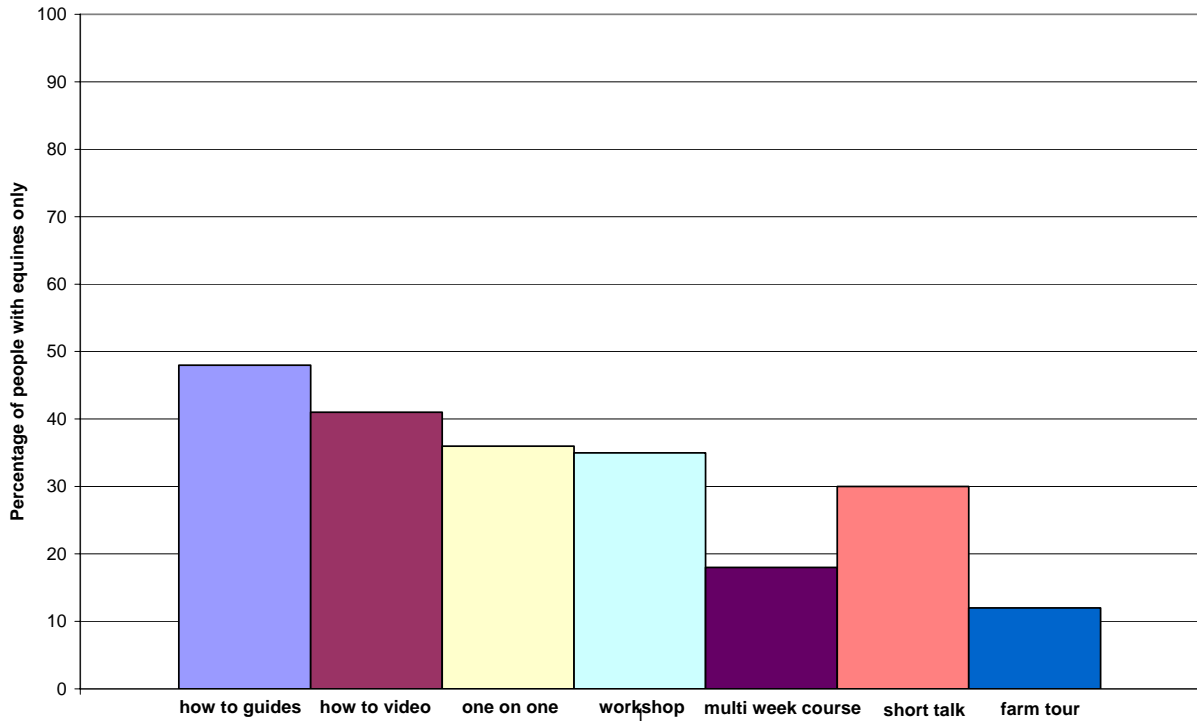
Preferred ways to learn new info: Mixed livestock



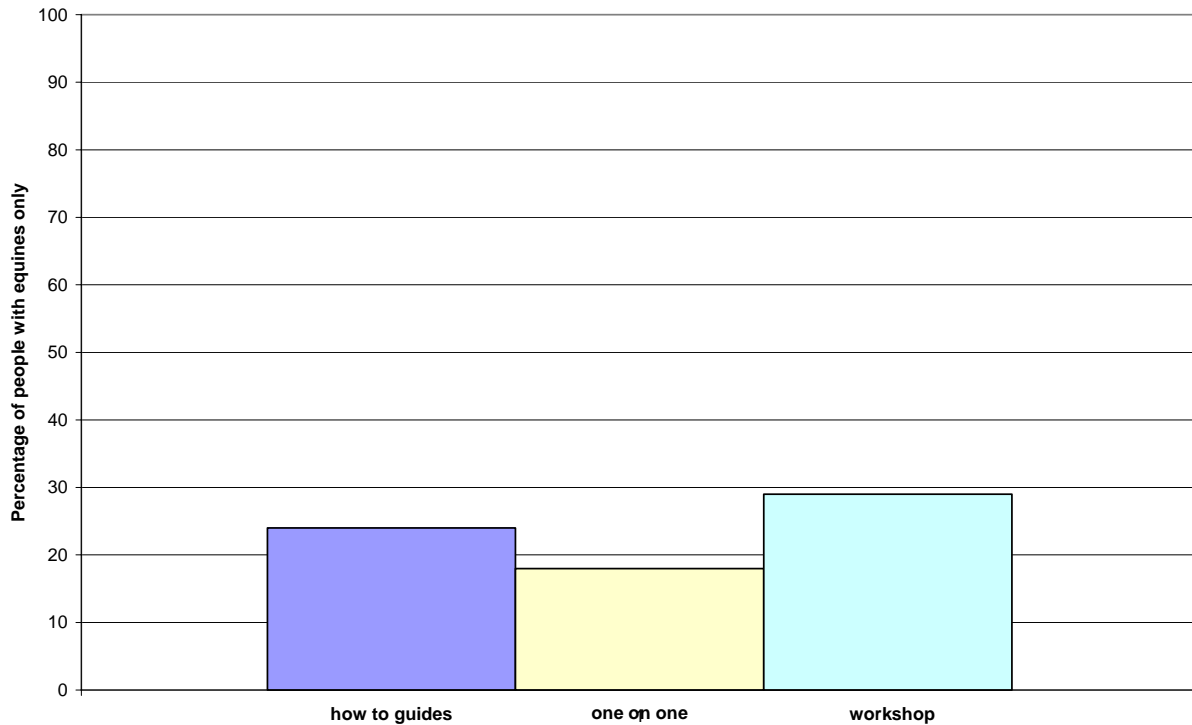
#1 Preferred ways to learn new info: Mixed livestock



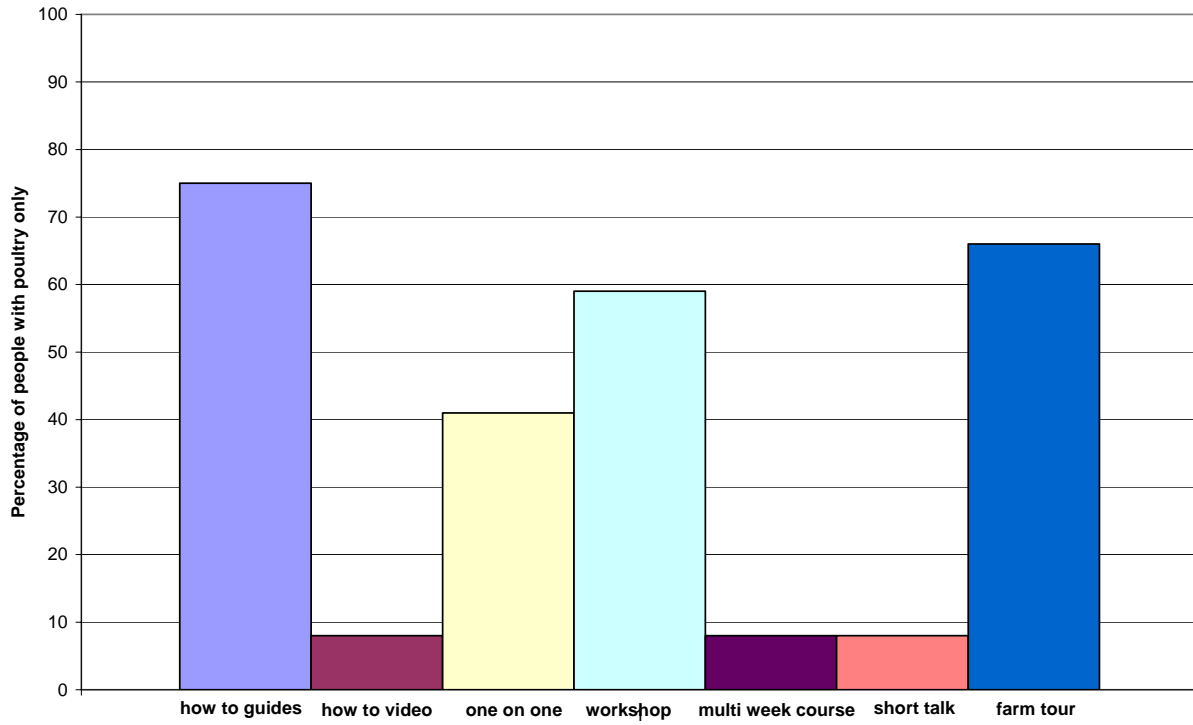
Preferred ways to learn new info: Equines



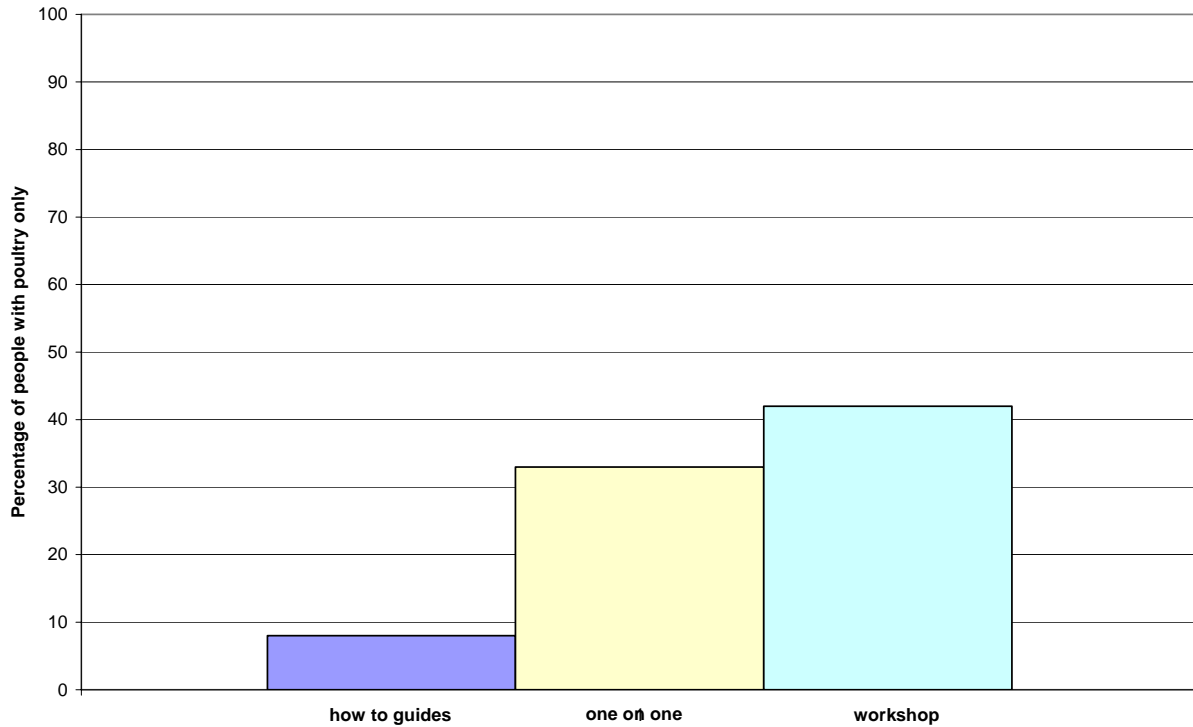
#1 Preferred ways to learn: Equines



Preferred ways to learn new info: Poultry



#1 Preferred ways to learn new info: Poultry



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.

Bold number is the correct response.
M responses are listed first
E responses are listed second
P responses listed third

Manure Management

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.

14. Flies, odor and convenience are the most important things to consider when locating a place to store manure.

	Disagree	Agree	Don't Know
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.	1 26%	2 46%	DK 16%
	25%	65%	10%
	10%	90%	0%
14. Flies, odor and convenience are the most important things to consider when locating a place to store manure.	1 39%	2 46%	DK 7%
	45%	55%	0%
	20%	60%	20%

	Disagree	Agree	Don't Know
Bold number is the correct response. M responses are listed first E responses are listed second P responses listed third			
15. Animal manure contains bacteria and other things (viruses, parasites and other microbes) that can cause illness.	1 2%	2 82%	DK 7%
	5%	85%	10%
	0%	90%	10%
16. Animal manure contains nutrients such as nitrogen, phosphorus and potassium.	1 2%	2 82%	DK 7%
	0%	85%	10%
	0%	90%	10%
17. Animal manure is a valuable source of organic matter and natural fertilizer for fields and crops.	1 0%	2 90%	DK 7%
	5%	85%	10%
	0%	100%	0%
18. It does not matter how much manure is applied to the land.	1 72%	2 5%	DK 13%
	75%	0%	25%
	60%	10%	20%
19. It is important to consider the time of year when applying manure to the land.	1 10%	2 67%	DK 15%
	5%	75%	20%
	0%	90%	10%
20. Human health risks associated with animal manure can only occur through direct contact.	1 52%	2 20%	DK 20%
	60%	0%	35%
	70%	10%	20%

Bold number is the correct response.

M responses are listed first

E responses are listed second

P responses are listed third

21. Animals can develop health problems when subjected to areas of concentrated animal waste.

Disagree	Agree	Don't Know
1 3%	2 77%	DK 11%
0%	90%	5%
0%	90%	10%

Animal Management

22. One **animal unit** is equal to 1,000 pounds of live animal weight.

Disagree	Agree	Don't Know
1 7%	2 18%	DK 66%
0%	20%	75%
0%	0%	90%

23. Animal yards (outdoor pens, corrals, exercise areas, etc.) should be sized based on the number and type of animals occupying them.

Disagree	Agree	Don't Know
1 2%	2 82%	DK 8%
0%	95%	5%
0%	90%	10%

24. Easy access to food, shelter and water are the most important things to consider when locating an animal yard.

Disagree	Agree	Don't Know
1 18%	2 66%	DK 7%
10%	85%	5%
20%	80%	0%

25. There is a difference between a properly managed animal yard and a properly managed pasture.

Disagree	Agree	Don't Know
1 10%	2 64%	DK 16%
5%	70%	25%
0%	50%	40%

26. For grazing animals such as cows, sheep, etc., properly managed pastures can provide valuable feed, reducing hay and grain costs.

Disagree	Agree	Don't Know
1 3%	2 84%	DK 5%
0%	85%	15%
0%	70%	30%

Bold number is the correct response.
M responses are listed first
E responses are listed second
P responses listed third

Land and Water Resources

27. One to two acres of land are needed to support one **animal unit**.

Disagree	Agree	Don't Know
1 12%	2 35%	DK 42%
7%	79%	14%
0%	33%	67%
1 2%	2 74%	DK 12%
0%	93%	7%
17%	67%	0%
1 7%	2 65%	DK 19%
0%	71%	14%
17%	83%	0%
1 5%	2 56%	DK 31%
0%	45%	50%
0%	70%	20%
1 66%	2 10%	DK 16%
75%	0%	25%
70%	0%	30%
1 52%	2 11%	DK 28%
55%	10%	35%
70%	0%	20%

28. The type of soils on a given property can be different and affect its suitability for different land uses accordingly.

29. Groundwater and surface water are inter-connected. If one water resource becomes polluted, it can affect the other water resource.

30. Nitrogen and phosphorus are potential sources of water pollution.

31. The only way a surface water body can be impacted by animal manure is when animals have direct access to the water body.

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.

Bold number is the correct response.

M responses are listed first

E responses are listed second

P responses listed third

33. An animal yard or manure storage area should be at least 100 feet away from a drinking water well.

	Disagree	Agree	Don't Know
	1	2	DK
	0%	64%	26%
	5%	65%	30%
	0%	70%	30%

Section III

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

M:

- 75% to protect animals' general health
- 48% to improve animals' performance
- 70% to control odor and flies
- 24% to improve the appearance of my property
- 61% to be a good neighbor
- 10% to be like my peers
- 72% to protect the quality of my drinking water
- 70% to protect the surrounding environment
- other: to keep animal comfortable

Selected as #1 choice:

- 29% to protect animals' general health
- 37% to protect the quality of my drinking water
- 6% to improve animals' performance

E:

- 94% to protect animals' general health
- 24% to improve animals' performance
- 94% to control odor and flies
- 47% to improve the appearance of my property
- 65% to be a good neighbor
- 82% to protect the quality of my drinking water
- 65% to protect the surrounding environment

Selected as #1 choice:

- 41% to protect the quality of my drinking water
- 41% to protect animals' general health
- 12% to protect the surrounding environment

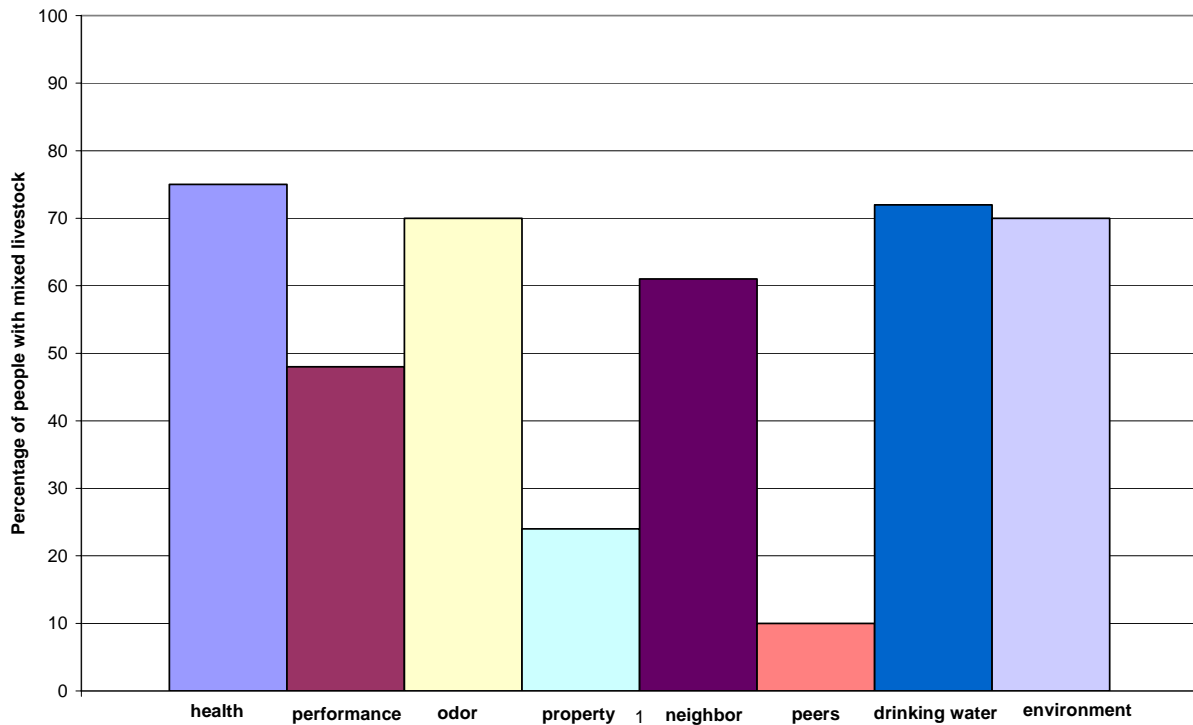
P:

- 75% to protect animals' general health
- 17% to improve the animals' performance

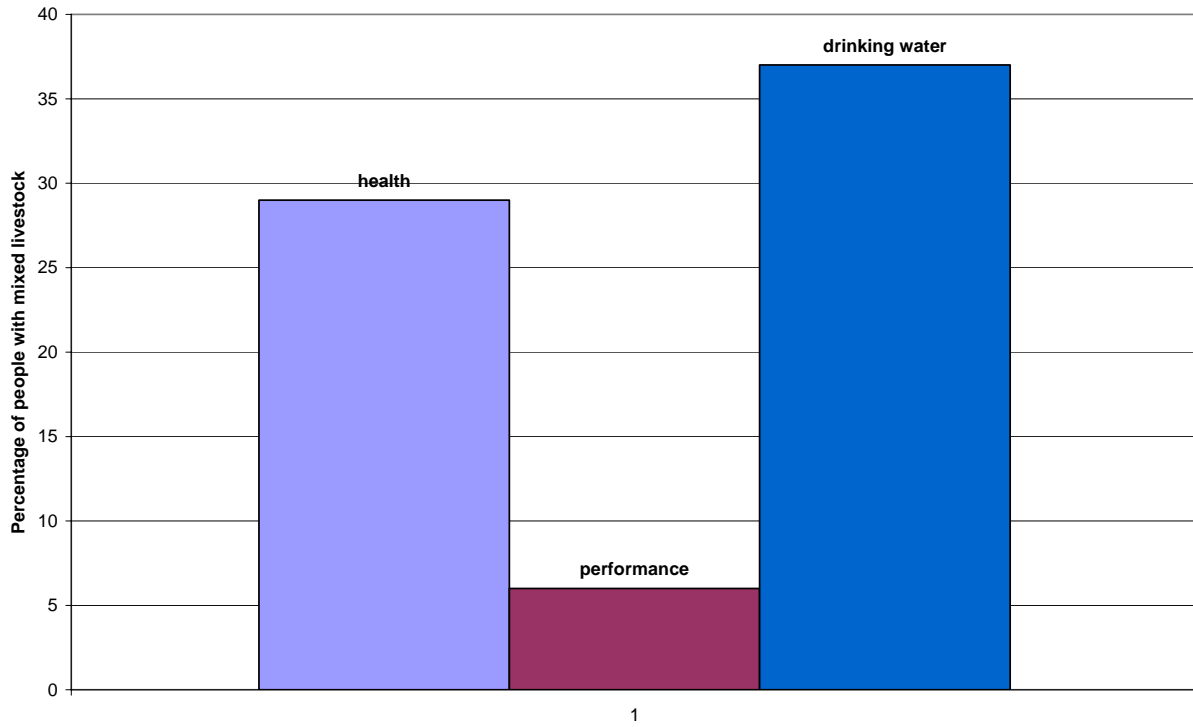
83% to control odor and flies
42% to improve the appearance of my property
67% to be a good neighbor
67% to protect the quality of my drinking water
58% to protect the surrounding environment

Selected as #1 choice:
67% to protect animals' general health
17% to protect the quality of my drinking water

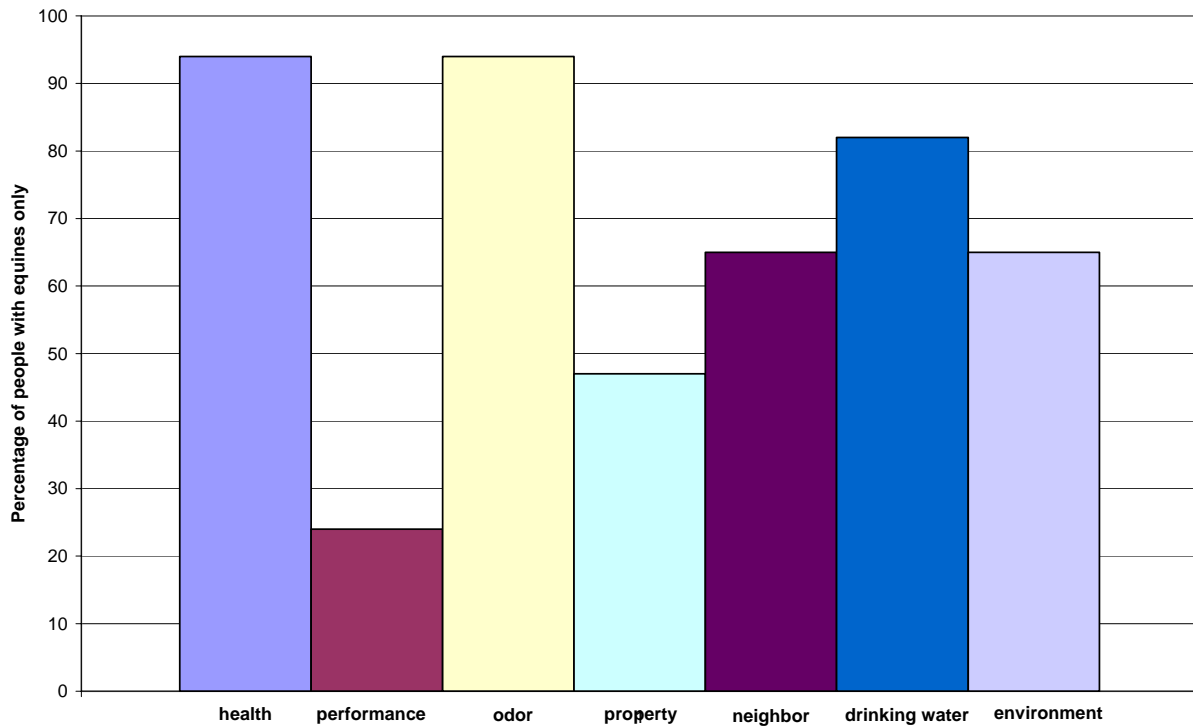
Reasons why manure management is important: Mixed Livestock



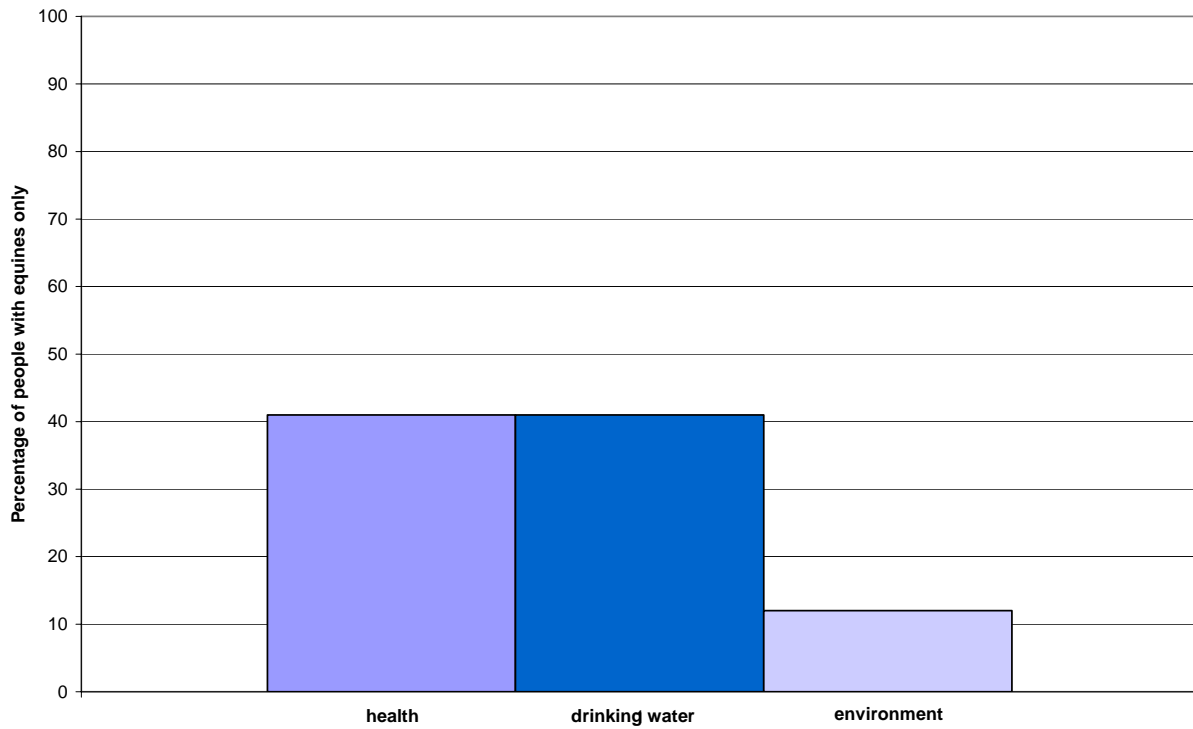
#1 Reasons why manure management is important: mixed livestock



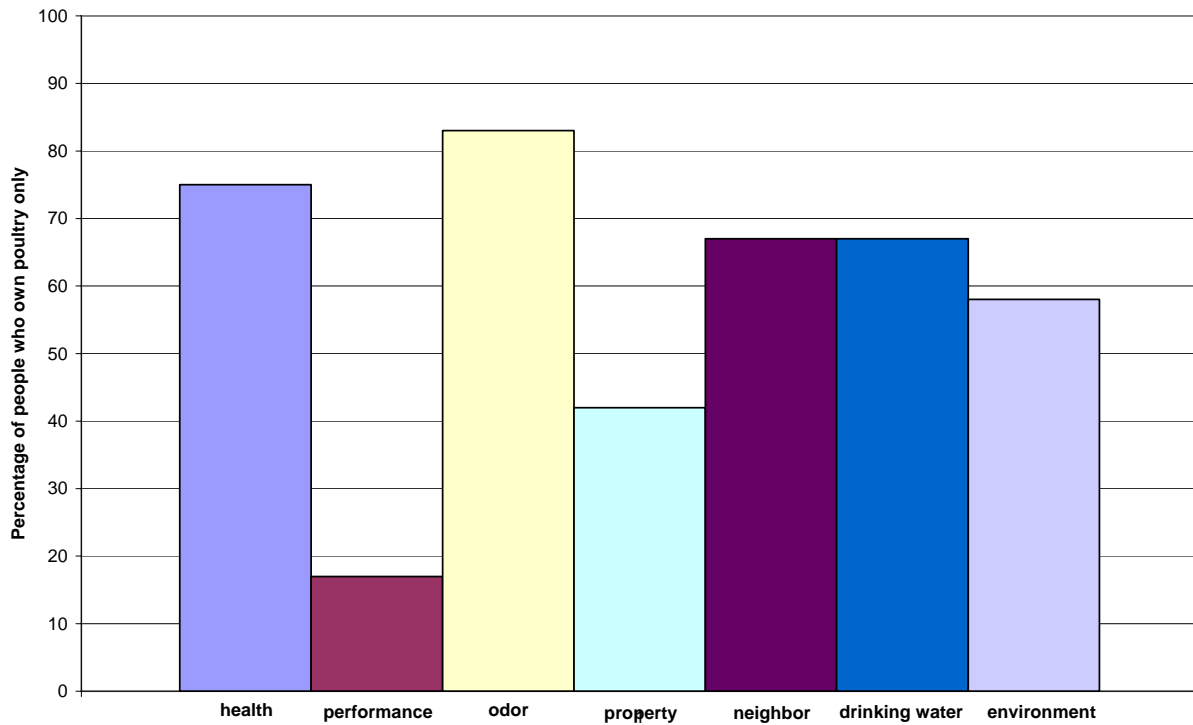
Reasons why manure management is important: Equines



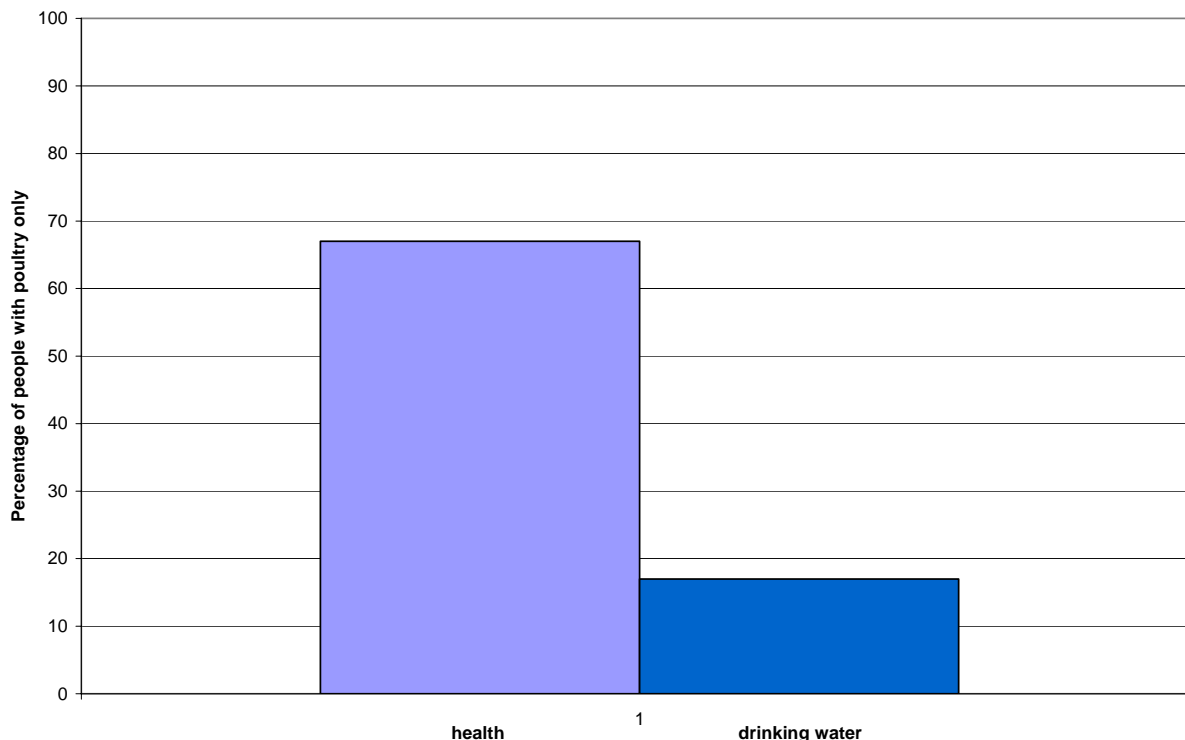
#1 Reasons why manure management is important: Equines



Reasons why manure management is important: Poultry



#1 Reasons why manure management is important: Poultry



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:

M: 28% Knowledge followed by 19% who do not feel there are any factors limiting management

E: 29% Money followed by equipment, land and time (all 14%)

P: 50% do not feel that there are any factors limiting management, 33% knowledge

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:

M:	E:	P:
Cost: 42%	Cost: 57%	Cost: 0%
Easy to do: 14%	Easy to do: 7%	Easy to do: 33%
Time: 42%	Time: 28%	Time: 50%
Labor: 32%	Labor: 35%	Labor: 17%
Equipment: 47%	Equipment: 50%	Equipment: 33%
Land: 25%	Land: 35%	Land: 34%

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.

	M responses listed first					
	E responses listed second					
	P responses listed third					
	1	2	3	4	5	NA
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.	53%	14%	9%	5%	2%	9%
	43%	7%	0%	21%	0%	7%
	83%	0%	0%	0%	17%	0%
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.	1 33%	2 23%	3 9%	4 14%	5 5%	NA 9%
	29%	29%	7%	0%	14%	0%
	67%	17%	17%	0%	0%	0%
39. Store manure under a roofed area – does not need to be enclosed.	1 7%	2 7%	3 12%	4 30%	5 19%	NA 21%
	7%	0%	36%	14%	21%	0%
	17%	0%	33%	0%	50%	0%
40. Actively compost the manure.	1 51%	2 19%	3 12%	4 2%	5 0%	NA 12%
	21%	14%	29%	14%	0%	0%
	67%	17%	17%	0%	0%	0%
41. Install a concrete pad/floor with walls or other storage structure to contain the manure.	1 19%	2 9%	3 7%	4 14%	5 28%	NA 19%
	0%	29%	14%	14%	21%	0%
	0%	0%	33%	0%	67%	0%

42. Improve how manure is spread on my own land – based on soil tests, proper timing, etc.	1	2	3	4	5	NA
	30%	26%	7%	7%	5%	21%
	21%	43%	7%	7%	0%	0%
	0%	33%	50%	0%	17%	0%
43. Pay to have manure hauled away to a place where it can be safely recycled or composted.	1	2	3	4	5	NA
	7%	2%	12%	23%	35%	16%
	7%	7%	7%	29%	29%	0%
	0%	17%	0%	17%	50%	17%
44. Install roof gutters to direct roof water away from manure storage areas and animal yards.	1	2	3	4	5	NA
	12%	12%	12%	9%	12%	40%
	7%	21%	14%	14%	7%	14%
	17%	0%	0%	33%	33%	17%
45. Install fencing to subdivide animal yard(s) and rotate the animals through different paddocks.	1	2	3	4	5	NA
	23%	12%	14%	14%	12%	21%
	21%	7%	21%	7%	7%	14%
	17%	17%	17%	0%	0%	50%
46. Restrict the animals from having access to a drinking water well or water body.	1	2	3	4	5	NA
	28%	12%	5%	2%	12%	37%
	14%	14%	14%	14%	7%	14%
	17%	17%	33%	0%	0%	33%
47. Install a roof over part or the entire animal yard.	1	2	3	4	5	NA
	26%	12%	7%	14%	14%	23%
	0%	0%	14%	14%	36%	14%
	33%	0%	17%	33%	0%	17%
48. Install a concrete pad or geo-textile material in part or all of the animal yard to improve muddy areas.	1	2	3	4	5	NA
	21%	5%	19%	14%	21%	16%
	7%	7%	36%	14%	14%	0%
	0%	0%	0%	33%	0%	67%

49. Find additional land nearby to periodically rotate the animals through – especially during the growing season.	1 12%	2 14%	3 16%	4 19%	5 16%	NA 19%
	7%	21%	14%	14%	21%	0%
	17%	33%	0%	0%	0%	50%

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.

	M responses listed first E responses listed second P responses listed third		
	Disagree	Agree	Not Sure
	1	2	NS
51. I would make improvements if government assistance was available to provide free technical and financial assistance.	5%	60%	30%
	0%	71%	7%
	17%	50%	17%
52. I would make improvements if reputable private consultants and service providers were available for hire to provide technical assistance and services as needed.	21%	30%	44%
	14%	14%	50%
	17%	50%	17%
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.	16%	33%	47%
	36%	21%	21%
	33%	33%	17%
54. I would make improvements if featured in a newspaper/magazine article, TV program segment, website, etc. for good stewardship.	30%	21%	44%
	29%	21%	29%
	33%	50%	0%

55. I would make improvements if my peers/fellow animal owners were also making improvements.	1	2	NS
	33%	28%	35%
	36%	21%	21%
	17%	33%	33%
56. I would make improvements if I was reminded that I needed to do so.	1	2	NS
	28%	44%	21%
	29%	36%	14%
	33%	50%	0%
57. I would make improvements to demonstrate good will in my neighborhood and be considered a good neighbor.	1	2	NS
	9%	70%	16%
	7%	71%	0%
	0%	83%	0%