



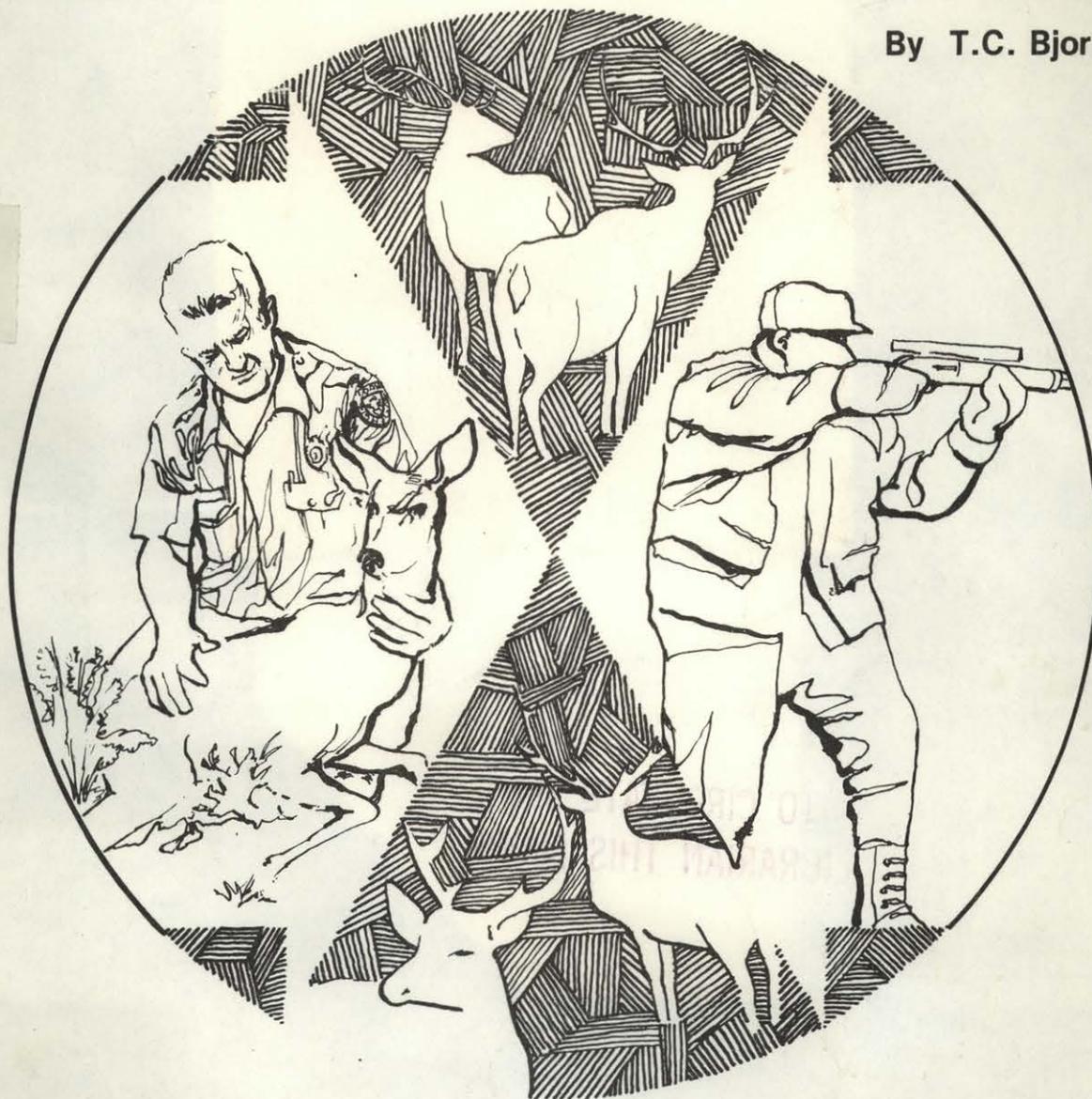
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Technical Report
Number 5

College of Forestry, Wildlife and Range Sciences

Opinions and Preferences of Idaho Hunters and Department of Fish and Game Employees

By T.C. Bjornn



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University
of Idaho

FOREST, WILDLIFE AND RANGE
EXPERIMENT STATION

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**OPINIONS AND PREFERENCES
OF IDAHO HUNTERS
AND DEPARTMENT OF FISH AND GAME EMPLOYEES**

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A Final Report
from
FEDERAL AID TO WILDLIFE RESTORATION
Project W-152-R
HUNTER PREFERENCE AND ECONOMIC STUDY
of the
IDAHO DEPARTMENT OF FISH AND GAME

Funds for this survey provided by the Idaho Department of Fish and Game (Federal Aid to Wildlife Restoration funds, Project W-152-R), University of Idaho and U.S. Fish and Wildlife Service.

1975

Contribution No. 19
of the
Forest, Wildlife and Range Experiment Station
University of Idaho
Moscow, Idaho 83843

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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D. C.

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ABSTRACT

We sent questionnaires to 7,602 residents who purchased Idaho hunting licenses in 1971 and to 204 Idaho Department of Fish and Game employees to compare their opinions and preferences on wildlife management issues. Fifty-four percent of the residents and 87% of the employees returned their questionnaires.

A majority of both residents and department employees preferred big game hunting over upland bird or waterfowl hunting. More of the residents preferred deer to elk, while more department employees preferred elk to deer. Residents and Department of Fish and Game employees expressed similar preferences for the type animal they preferred to bag.

More department employees listed their hunting in Idaho as satisfactory or excellent than did residents. Too many hunters was the reason listed most often by department employees for unsatisfactory big game hunting, while a lack of game was the reason listed most often by residents.

Seventy-nine percent of the department employees expressed confidence in the department's game count information and 61% had confidence in the harvest estimates. Half the residents indicated a lack of confidence or skepticism of the department's game count and harvest information.

Seventy-six percent of the department employees and 86% of the residents thought Idaho should restrict the number of out-of-state hunters. A larger proportion of department employees (18%) than residents (3%) thought unrestricted numbers of non-residents should be allowed to hunt in Idaho. Twenty-nine percent of the Department of Fish and Game employees thought the Idaho Fish and Game Commission should have allowed more out-of-state hunters in 1971 compared to only 2% of the residents. Fewer than 1 in 10 of the department employees versus one-third of the residents reported too much competition with non-residents while hunting big game.

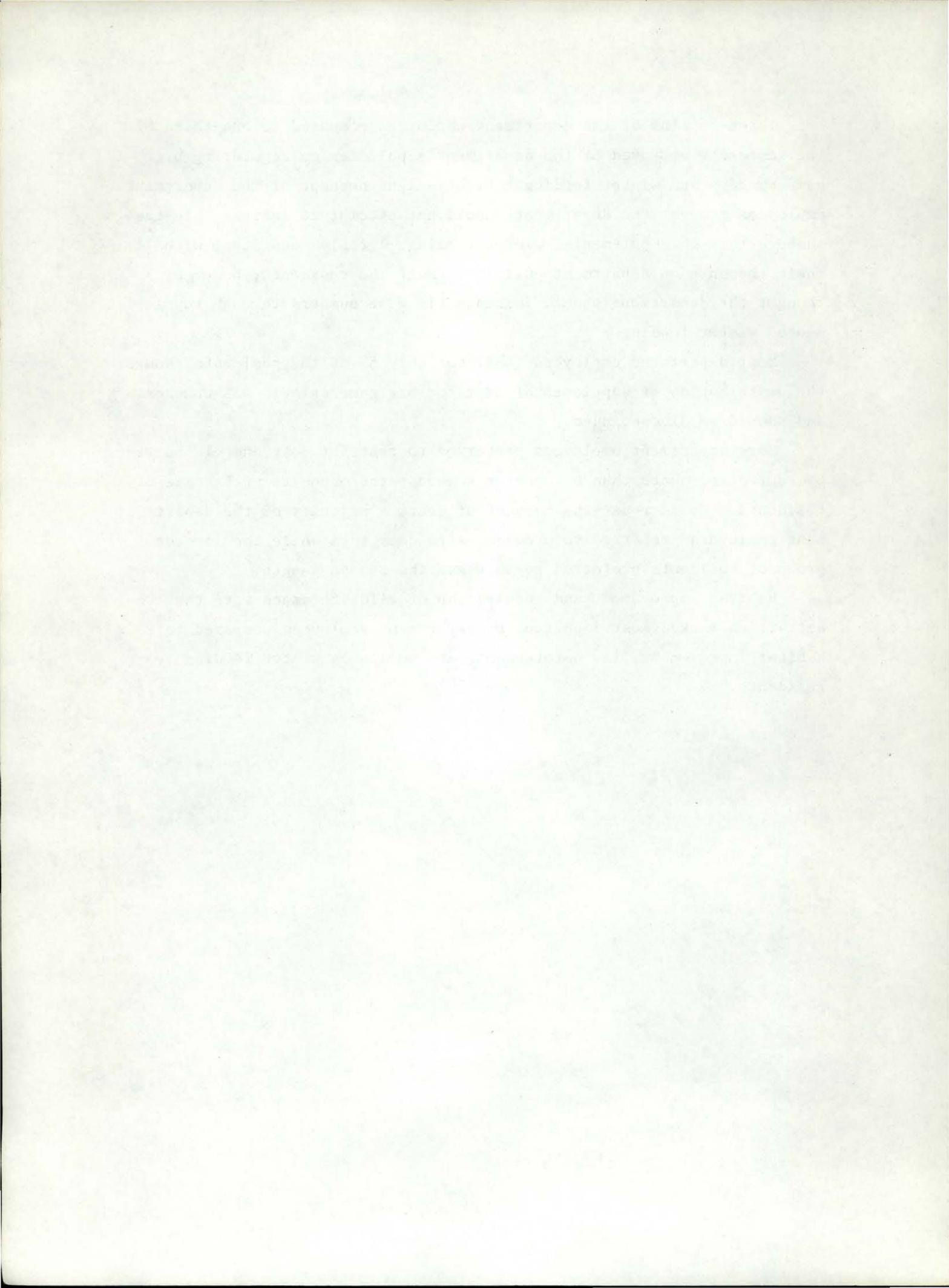
A majority of both residents (54%) and employees (76%) thought limited number of hen pheasants could be harvested but 18% of the residents compared to 5% of the department employees thought hens should not be hunted at any time. Seventy-one percent of the department employees versus 27% of the residents thought "put-and-shoot" hunting for game farm pheasants was a poor use of license fees and should be discontinued.

Three-fourths of the department employees compared to one-third of the residents approved of the department's policies on regulating big game numbers and winter feeding. Eighty-eight percent of the department employees thought the department should not attempt to increase big game numbers through supplemental winter feeding, a reply consistent with their thoughts on department policies. Half the residents, however, thought the department should increase big game numbers through supplemental winter feeding.

Most department employees (68%) but only 5% of the residents thought the distribution of supplemental salt for big game animals was unnecessary and should be discontinued.

More department employees preferred to restrict deer and elk harvest by controlled hunts than by shorter seasons; the opposite preference of residents. To increase the harvest of deer, a majority of the department employees preferred to provide extra deer tags while the largest group of residents preferred to increase the season length.

Habitat improvement and acquisition of wildlife areas were the two activities ranked most important by department employees compared to habitat improvement, law enforcement, and emergency winter feeding by residents.



INTRODUCTION

In 1971, Idaho Department of Fish and Game administrators decided to seek information on topics of special concern from a larger, more diversified group of the hunting public. A survey was conducted to obtain a better description of the people who hunt in Idaho, their hunting activities, and their opinions and preferences on important issues related to hunting and management of wildlife in Idaho (Bjornn and Dalke, 1975). At the same time we sent questionnaires to the hunting public (hereafter referred to as the primary survey), I also sent questionnaires to personnel of the Idaho Department of Fish and Game. We wanted to compare the opinions and preferences of employees of the Department of Fish and Game with those of Idaho residents who purchased hunting licenses.

SURVEY METHODS

We sent the same questionnaire to Department of Fish and Game employees that we sent to licensed hunters in the primary survey (Fig. 1). We mailed questionnaires to 204 employees in December, 1971 and received 178 completed questionnaires for a return of 87%. We sent questionnaires to 7,602 residents of which 54% were completed and returned after two follow-up contacts.

I grouped the Department's employees into 6 categories as follows for analysis of their opinions and preferences: 1) game research and management, 2) conservation enforcement, 3) land and refuge management, 4) information and education, 5) fisheries research and management, and 6) fish hatcheries.

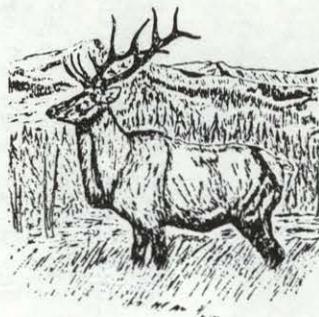
We summarized the data from the Department employees in the same way described by Bjornn and Dalke (1975) for the primary survey.

FINDINGS

Demographic comparisons:

Nearly all (90%) licensed hunters and virtually all the Department employees who completed the questionnaires were males. The largest proportion of department employees fit in the 30-50 age groups while a large proportion of the hunting public was less than 20 or over 60 years

**GOOD MANAGEMENT
REQUIRES GOOD INFORMATION**



**A SURVEY
of
RESIDENT
IDAHO
HUNTERS**

College Of Forestry, Wildlife
And Range Sciences
University of Idaho
Moscow

Dear Hunter:

This questionnaire is designed to assess your preferences and attitudes on a number of key issues and problems in Idaho wildlife management, your expenditures while hunting in Idaho, and to provide background information to help us describe people who hunt in Idaho. This is an opportunity for you to participate in decisions regarding the future management of wildlife in Idaho. Please take the time to provide us with the information requested.
Thank you.

1. How many years have you hunted each category of game in Idaho, and which type of hunting do you most prefer (Rank from 1 to 3)? Then list the one species in each category that you most prefer to hunt.

	Years Hunted	Rank	Preferred Species
Big Game	_____	_____	_____
Upland Birds	_____	_____	_____
Waterfowl	_____	_____	_____

2. Rank (1 to 3) the three most important sources of your information about hunting and fishing regulations and wildlife management programs in Idaho:

- Hunting and fishing magazines
- Newspapers
- Television
- Radio
- License vendors
- Fish and Game Department regulations
- Idaho Wildlife Review
- Friends—hunting companions
- Sportsmen club meetings
- Other (List) _____

3. Please estimate the number of miles your personal vehicle was driven in Idaho during SEPTEMBER, 1971, when you hunted:

	Miles driven
Big Game	_____
Upland Birds	_____
Waterfowl	_____

4. For each species of wildlife you hunted in Idaho during SEPTEMBER, 1971, please list the number of days you hunted in each area (See Map).

Species Hunted	Days Spent Hunting in Each Area:			
	Area		Days	
Only Elk	_____	_____	_____	_____
Only Deer	_____	_____	_____	_____
Deer & Elk	_____	_____	_____	_____
Antelope	_____	_____	_____	_____
Ducks	_____	_____	_____	_____
Geese	_____	_____	_____	_____
Chukars	_____	_____	_____	_____
Quail	_____	_____	_____	_____
Pheasant	_____	_____	_____	_____
Forest Grouse	_____	_____	_____	_____
Other	_____	_____	_____	_____

(list)

5. Please indicate if you hunted in Idaho during SEPTEMBER, 1971. If you bagged some game, list the species and number taken.

	Hunted in September?		Species and number bagged
	Yes	No	
Big Game	<input type="checkbox"/>	<input type="checkbox"/>	_____
Upland Birds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Waterfowl	<input type="checkbox"/>	<input type="checkbox"/>	_____

6. Why do you go hunting? Rank in order of importance (1 to 3) the three major reasons why you hunt with "1" the most important.

- Meat Relaxation-change of pace
- Trophy Opportunity to get out-of-doors
- Companionship Challenge of the hunt
- Isolation Do not hunt
- Observe Wildlife Other (list) _____

7. If you hunt for big game, which type of animal do you most prefer? (Check ONE for each species).

	Deer	Elk	Antelope
No preference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fawn, calf, or kid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dee or cow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small buck or bull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Large buck or bull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Please mark the term below which best describes your degree of satisfaction with your hunting in Idaho (Check ONE in each game category)

	Big Game	Upland Birds	Water-fowl
Unsatisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Opinion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. If you were not completely satisfied while hunting in Idaho, which reason was the most responsible for your lack of satisfaction? Check the single most important reason for each game category.

	Big Game	Upland Birds	Water-fowl
Did not bag game sought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too many hunters in the area hunted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not enough game	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outfitter and guide services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(describe) _____

10. Which of the following best expresses your feeling regarding out-of-state hunters and hunting of wildlife in Idaho? (Check ONE)

- Allow unrestricted numbers of out-of-state hunters in Idaho.
- Restrict the number of out-of-state hunters in Idaho.
- No Opinion.

If you believe out-of-state hunters should be restricted, which of the following do you prefer? (Check One)

- Out-of-state hunters should be allowed to hunt only in those areas where residents do not adequately harvest the game.
- Restrict the number of out-of-state hunters to 20% 10% or 5% of all hunters.
- No out-of-state hunters should be allowed to hunt in Idaho.

11. If you hunted in Idaho during 1971, which of the categories below best describes your experiences with regard to competition with the out-of-state hunters? (Check ONE for each game category)

	Big Game	Upland Birds	Water-fowl
Not noticeable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noticeable, but not objectionable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too much competition from non-residents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Opinion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Which of the following best expresses your feeling regarding the Fish and Game Commission's limitation on the number of out-of-state big game hunters in 1971? (Check ONE)

- Should have allowed more out-of-state hunters.
- Should have reduced the number of out-of-state hunters further.
- Allowed about the right number.
- Do not know about restrictions.
- No Opinion.

13. If the number of out-of-state hunters were significantly restricted, would you be willing to pay increased annual fees to help make up for the lost revenue from license and tag sales?

	If yes, how much?				
	No	\$1	\$3	\$5	More
Hunting Licenses	<input type="checkbox"/>				
Elk Tag	<input type="checkbox"/>				
Deer Tag	<input type="checkbox"/>				

14. Which of the following best describes your views regarding the distributing of supplemental salt for big game in certain areas? (Check ONE)

- Necessary and should be continued or expanded.
- Unnecessary and should be curtailed or stopped.
- No Opinion.

Figure 1. The questionnaire sent to residents in the primary survey and to professional employees of the Idaho Department of Fish and Game.

15. As the number of hunters increases, "quality" hunting areas tend to become "quantity" hunting areas unless actions are taken to limit the number of hunters and harvests. Which of the following do you most prefer? (Check ONE)

- Manage each herd for quantity hunting (maximum harvest, open season with no restrictions on number of hunters, lower rate of success.)
- Manage each herd for quality hunting (trophy animals, less than maximum harvest of animals, low density of hunters through use of special permits, higher rate of success).
- Manage some herds for quality hunting and the remainder for quantity hunting.
- No Opinion.

16. In those instances where the harvest of deer and elk must be reduced in certain management units, which do you most prefer? (Check ONE)

- Shorter general season.
- Controlled hunt with number of hunters regulated by drawing thus regulating the number of animals harvested but a longer season allowed.
- No Opinion.

17. When an increased harvest of deer is necessary in a particular management unit, which one of the following methods would you most prefer? (Check ONE)

- Increased length of seasons, one deer per hunter on regular tag.
- Provide extra deer tags so that hunters may take an additional deer.
- No Opinion.

18. In your opinion is the amount and condition of vegetation on big game winter range the proper basis for managing big game populations? (Check ONE)

- Yes No No Opinion

19. Do you have confidence in the Idaho Fish and Game Department's figures on game counts and annual harvest? (Check ONE for each category)

- | | | | | |
|------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Yes | No | Skeptical | No Opinion |
| Game counts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Annual Game Kill | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

20. Please indicate if you believe the Fish and Game Department should place more, less, or no change in the emphasis on all the activities listed below. Then rank (1 to 3) the three activities you believe are most important.

	More	Less	No Change	Rank
<input type="checkbox"/> Predator control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Habitat improvement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Law enforcement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Management programs (check stations, game and bird counts, trap-planting, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Game farms for "put and take" bird shooting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Emergency winter feeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Acquisition of wildlife areas (winter range, waterfowl marshes, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Improved access to hunting areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Public information programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Research and evaluation of programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Others (describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

21. Do you believe the Fish and Game Department is doing a satisfactory job of managing the following species. (Check ONE for each species)

	Yes	No	No Opinion
Deer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trophy animals (sheep, goats, moose)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antelope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pheasants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sage grouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forest grouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chukar partridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waterfowl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. Which of the following best expresses your opinion of supplemental winter feeding to attempt to artificially increase the abundance of deer or elk (Check ONE)?

- The Department should not attempt to increase big game herds in excess of the natural carrying capacity of winter range.
- The Department should attempt to increase big game herds through supplemental winter feeding.
- No Opinion.

Do you approve or disapprove of the Fish and Game Department's current policy on (1) regulating big game numbers and (2) emergency winter feeding? (Check ONE in each column)

	Big Game numbers	Winter feeding
Approve	<input type="checkbox"/>	<input type="checkbox"/>
Disapprove	<input type="checkbox"/>	<input type="checkbox"/>
No Opinion	<input type="checkbox"/>	<input type="checkbox"/>
Do not know policy	<input type="checkbox"/>	<input type="checkbox"/>

23. Which of the following best describes your feelings on roads as related to big game hunting? (Check ONE)

- Roads in the big game areas provide improved access and easier hunting, and I believe more should be constructed in the future.
- Present access to big game areas by roads is adequate and no more roads are needed. New roads for logging should be closed to public use after logging.
- Overcrowding of big game hunting areas has already occurred because of too many roads. No new roads should be constructed and some existing roads should be closed.
- No Opinion.

24. What are your feelings about hunting hen pheasants? (Check ONE)

- Hen pheasants should not be hunted at any time.
- Limited numbers of hen pheasants should be taken by hunters under special regulations, seasons or bag limits.
- Both cocks and hens should be hunted without restriction, same as other game birds.
- No Opinion.

25. Which of the following best describes your views concerning hunting provided by game farm pheasants? (Check ONE)

- Providing hunting with game farm pheasants is a good program and should be continued.
- "Put and shoot" hunting for game farm pheasants is a poor use of license fees and should not be continued.
- No Opinion.

26. The pheasant season in southern Idaho opens at noon rather than daylight. Which of the following best expresses your feelings? (Check ONE)

- I am satisfied with the noon opening for pheasants.
- I prefer an early morning opening for pheasants.
- No Opinion.

27. When do you most prefer to hunt bear in Idaho? (Check ONE)

- Fall Year Round
- Spring No Opinion
- Fall and Spring

Should bear hunting with hounds be permitted? Yes No No Opinion

If yes, which would you most prefer? (Check ONE)

- In the Fall Only
- In the Spring Only
- In Fall and Spring
- Year Round

28. Please list your Age _____ Sex _____ Occupation _____

29. What was the approximate total yearly income of your family in 1971? (Check ONE)

- Under \$2,999 \$10,000-14,999
- \$3,000-4,999 \$15,000-19,999
- \$5,000-6,999 \$20,000-24,999
- \$7,000-9,999 \$25,000 or over

30. This question deals with the cost of your hunting trip(s) and is particularly important. Please estimate the cost of your hunting only. Do not include expenses paid by you for another person(s), but do include your expenses paid by someone else. What were your expenses while hunting in Idaho during SEPTEMBER, 1971, for:

	Big Game	Upland Birds	Waterfowl
Train, plane, bus fares
Lodging (motels, camping fees, etc.)
Guide and outfitter fees
Equipment rental (excluding outfitters fees)
Taxidermy and tanning
Game storage, processing and shipping
Miscellaneous supplies
Other (list)

31. Please record below the expenditures you made for equipment items during the last year (since SEPTEMBER, 1970) and how much of the total was spent in Idaho. Please estimate the percentage of the total amount of time you used each equipment item purchased during the last year while hunting in Idaho. For example, if you purchased a camper and you used it a total of 4 weeks, of which one was for a hunting trip in Idaho, you would write down 25%.

Equipment	Total Cost of Equipment Purchased	Cost of Equipment Purchased in Idaho	Percent of total hunting time equipment was used while hunting in Idaho last year
Firearms and bows
Boating Equipment (boats, motors, accessories)
Camping equipment (tents, sleeping bags, etc.)
Recreational vehicles (4-wheel drive, campers, etc.)
Special clothing, (boots, rainwear, waders, etc.)
Dogs or horses and their care
Miscellaneous (binoculars, etc.)
Other (list)

Thank You

Figure 1. Continued

of age (Table 1). In 1971, most department employees had incomes in the \$7-15,000 range (Fig. 2). Idaho families and residents in the primary survey also had incomes in the \$7-15,000 range.

Table 1. The percentage of residents in the primary survey and Department of Fish and Game employees in each age group.

Groups	Number in sample	Age group (% of people)					
		19	20-29	30-39	40-49	50-59	60+
Residents	4105	19.1	23.0	19.5	16.8	12.9	8.7
Employees	177	0	15.8	36.7	24.9	19.2	3.4

Our survey of Department of Fish and Game employees included only the professional staff. We did not send questionnaires to the clerical staff of the department. One-third of the resident hunters were classified as professional or student but there were also large groups of craftsmen and persons who operated small businesses.

Type Hunting, Species, and Animals Preferred

Like the resident hunters, a majority of the department employees preferred big game hunting over waterfowl or upland bird hunting (Fig. 3). A larger proportion of the department employees than the resident hunters listed upland birds and waterfowl as their most preferred type of hunting (Table 2). The proportion of fish and game employees who preferred the various types of hunting varied between the occupational groupings.

The proportion of fish and game employees who preferred the various species of big game and upland birds differed from the resident hunters (Fig. 4). A slightly larger proportion of the department employees preferred elk to deer whereas more of the resident hunters preferred deer to elk. The pheasant was the upland bird preferred by the largest proportion of employees and residents but a larger proportion of department employees preferred chukar and forest grouse than did the residents.

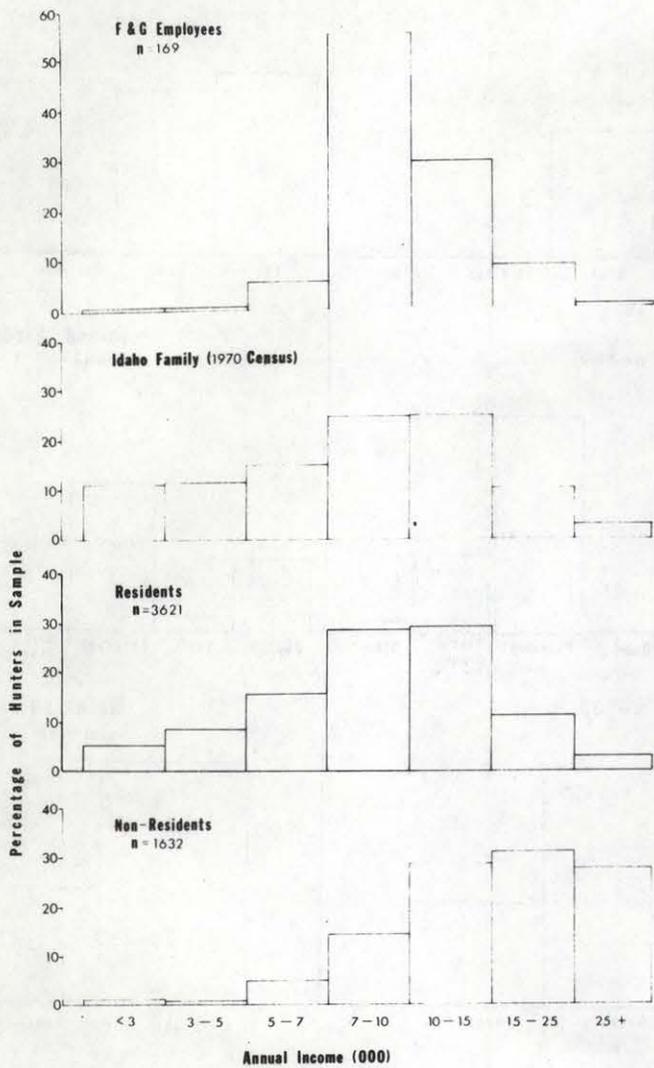


Fig. 2. The percentage of Department of Fish and Game employees, Idaho families, residents and non-residents in the primary survey with annual incomes in each of the categories established in the survey.

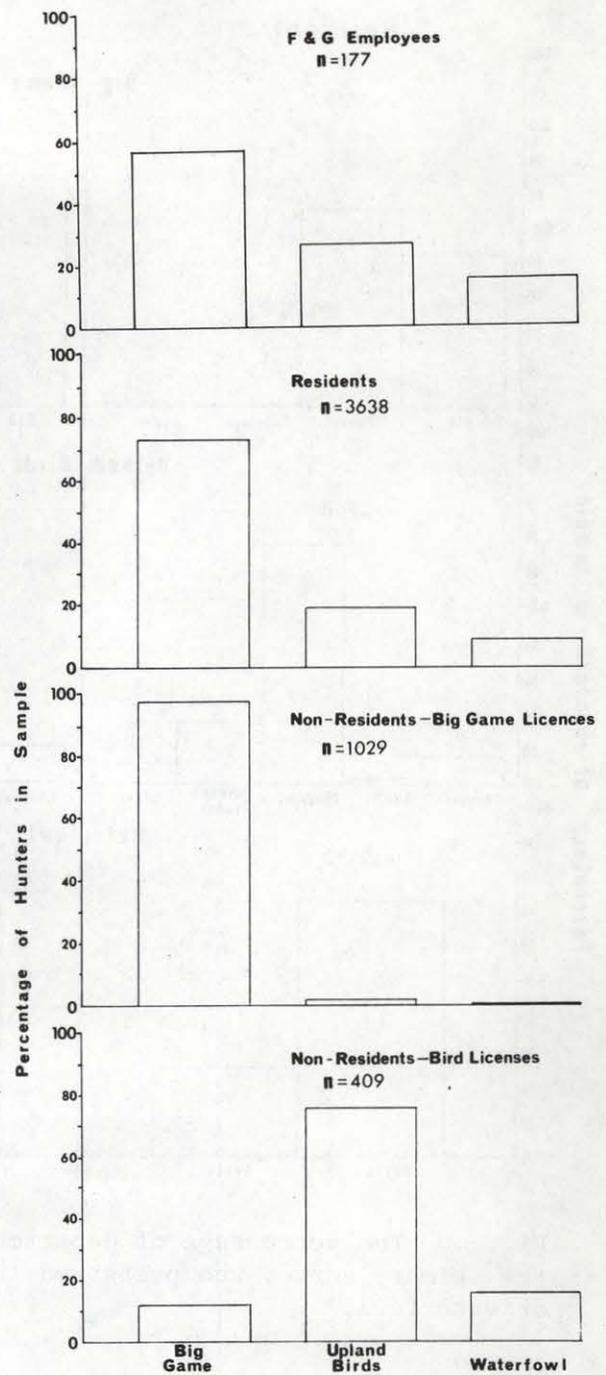


Fig. 3. The percentage of department employees, residents and non-residents of the primary survey who preferred hunting for big game, upland birds or waterfowl in Idaho.

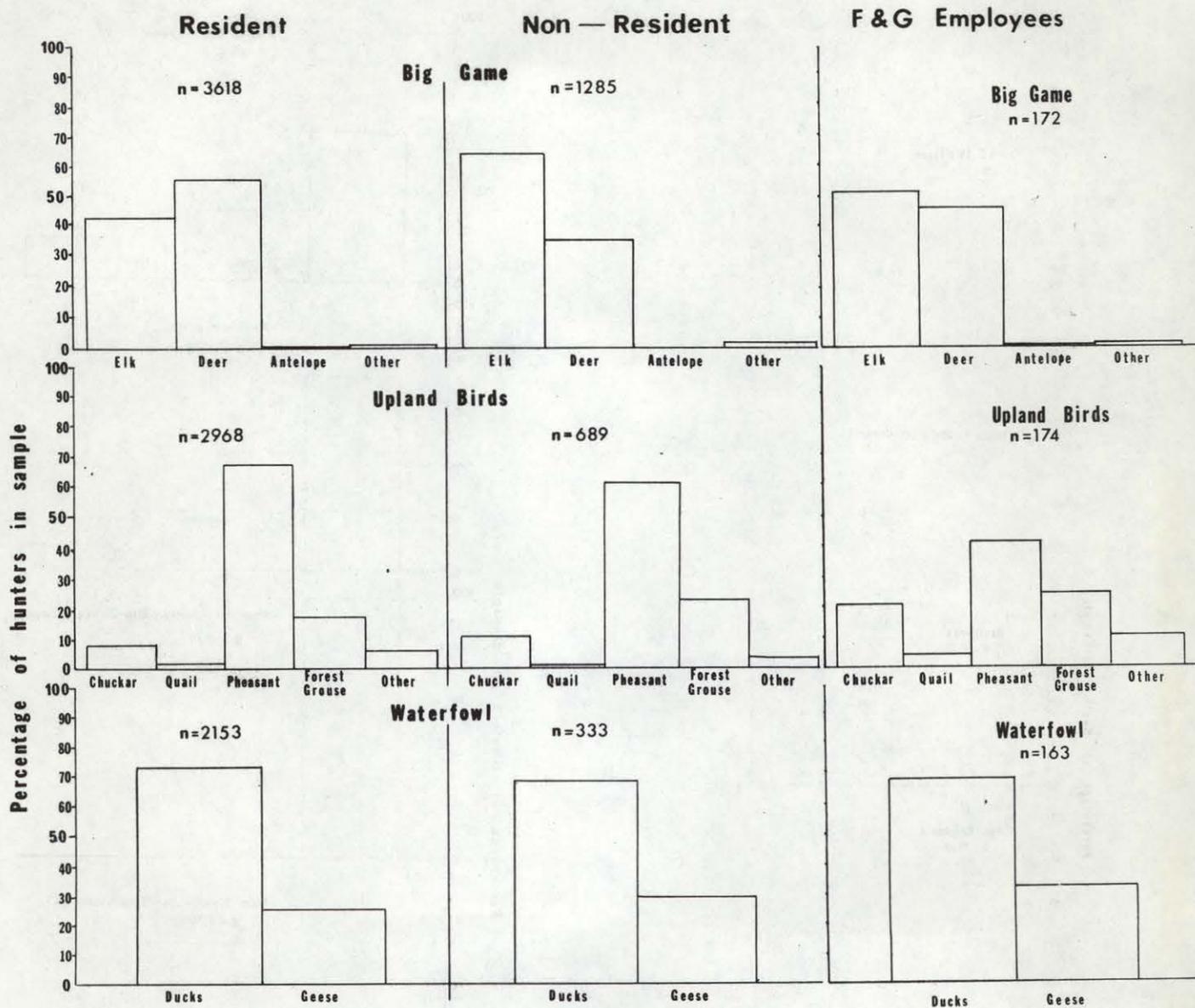


Fig. 4. The percentage of department employees, residents and non-residents of the primary survey who preferred the various species of big game, upland birds, or waterfowl.

Table 2. The percentage of residents and Fish and Game Department employees who preferred big game, upland bird and waterfowl hunting in 1971.

Groups	Number in sample	Type hunting preferred (% of people)		
		Big game	Upland bird	Water- fowl
Residents	3638	72.6	19.3	8.8
Fish and Game Department employees	177	57.1	27.7	15.3
Game and Research and Management	28	46.4	35.7	17.9
Conservation Enforcement	63	60.3	20.6	19.1
Refuge and Land Management	16	56.3	37.5	6.3
Information and Education	11	27.3	63.6	9.1
Fish Research and Management	19	47.4	21.1	31.6
Fish Hatcheries	38	73.7	21.1	5.3

The type of elk, deer or antelope which employees preferred to bag when big game hunting was similar to that of the residents, except that a smaller proportion of the department employees listed no preference in the type animal they bagged (Fig. 5). Most fish and game employees preferred a large buck when hunting antelope, whereas most resident hunters had no preference.

Satisfaction with Hunting

Fish and game employees listed a higher degree of satisfaction with their hunting in Idaho than did the resident hunters. Approximately 85% of the department employees rated big game hunting as excellent or satisfactory compared to only 55% of the residents (Fig. 6). Less than 10% of the department employees rated their big game hunting as unsatisfactory compared to more than 30% of the residents. A large proportion of the resident hunters didn't have an opinion regarding their satisfaction with upland bird or waterfowl hunting; perhaps because they did not participate in that type of hunting. Nearly 15% of the resident hunters were dissatisfied with their upland bird hunting compared to only 5% of the department employees.

Too many hunters was the most frequently listed reason for unsatisfactory big game hunting by department employees (Fig. 7). Lack of game

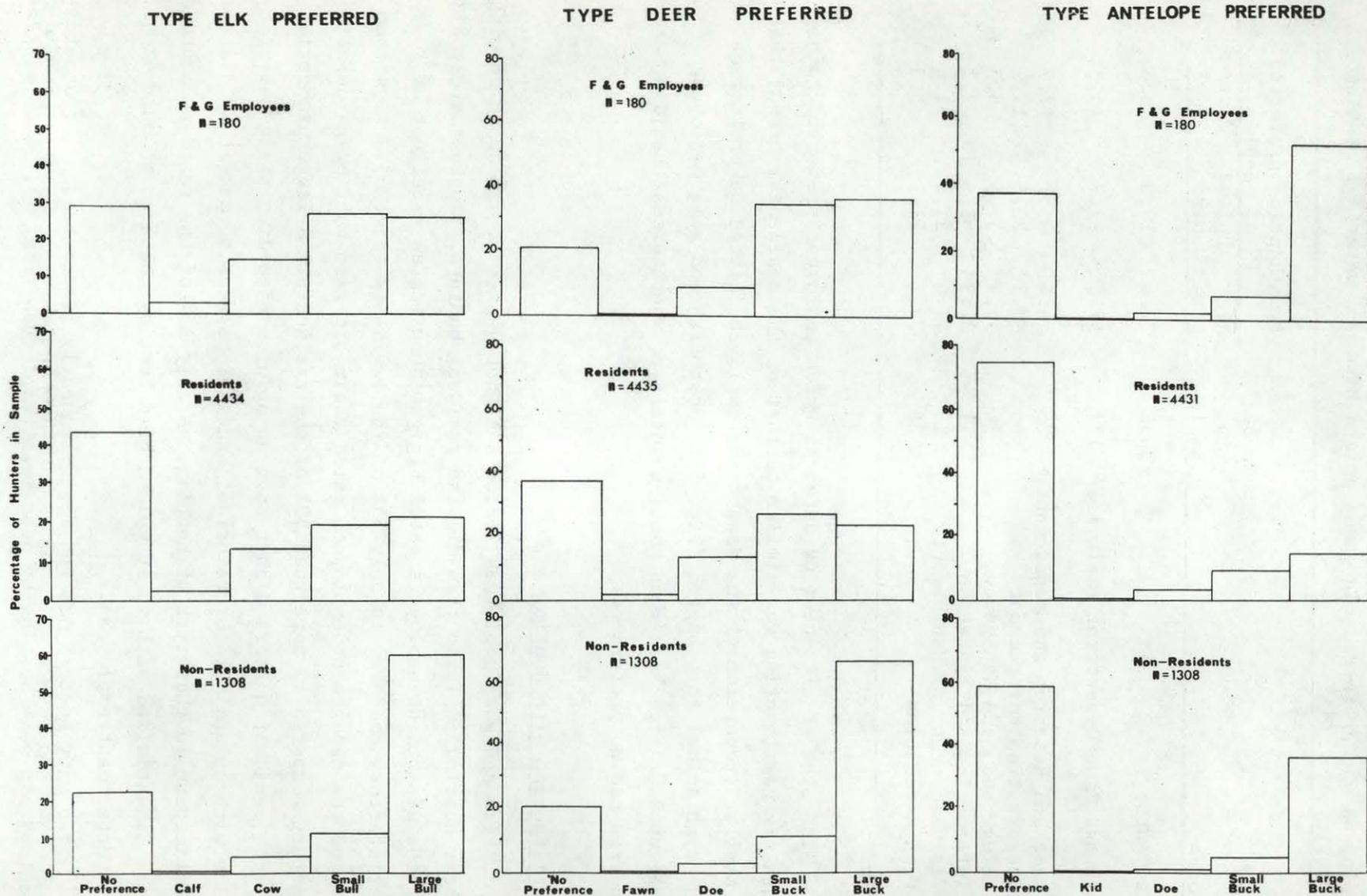


Fig. 5. The percentage of department employees, residents and non-residents who preferred various types of elk, deer or antelope.

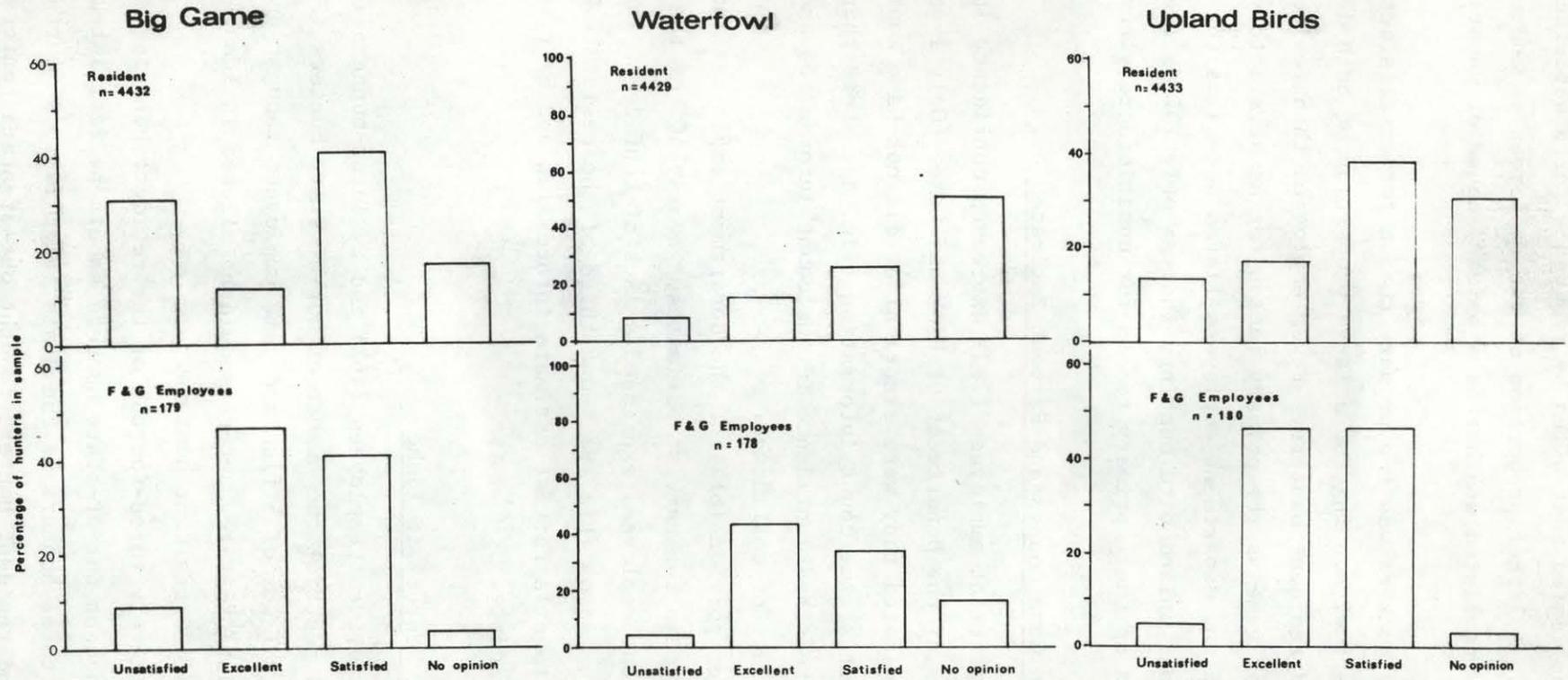


Fig. 6. The percentage of department employees and residents of the primary survey who considered their hunting in Idaho for big game, upland birds, or waterfowl as unsatisfactory, excellent or satisfactory.

was the reason listed most often by residents for unsatisfactory big game hunting. A larger proportion of the employees as compared to the resident hunters listed weather as a primary cause of unsatisfactory big game hunting.

Too many hunters was the primary reason for unsatisfactory upland bird and waterfowl hunting for a large proportion of both department employees and resident hunters. Fewer employees than resident hunters listed lack of game as the primary reason for unsatisfactory hunting. Nearly 40% of the department employees listed access as the primary reason for poor upland bird hunting, whereas only 10% of the residents listed access as their primary reason for unsatisfactory hunting.

Confidence in Game Counts and Harvest Estimates

Most Department employees (79%) expressed confidence in the game count figures of the Department of Fish and Game. Only 1 out of 5 employees indicated they were skeptical or did not have confidence in the department's game count information (Fig. 8). Less than 40% of the resident hunters had confidence in the count information and nearly half expressed a lack of confidence.

A smaller portion (61%) of the department employees indicated they had confidence in the harvest estimates. Nearly 40% of the fish and game department employees expressed a lack of confidence in harvest estimate information (Fig. 9). One-third of the residents had confidence in the department's harvest estimate information and half indicated a lack of confidence.

Non-resident Hunters in Idaho

Most department employees (76%) and resident hunters (86%) thought Idaho should restrict the number of out-of-state hunters (Fig. 10). Approximately 1 out of 5 fish and game employees thought unrestricted numbers of out-of-state hunters should be allowed in Idaho compared to only 1 out of 20 resident hunters.

Approximately three-fourths of the resident hunters and department employees thought out-of-state hunters should be restricted to a percentage of the total hunters in the state (Fig. 11). A fourth of the employees and resident hunters thought out-of-state hunters should be

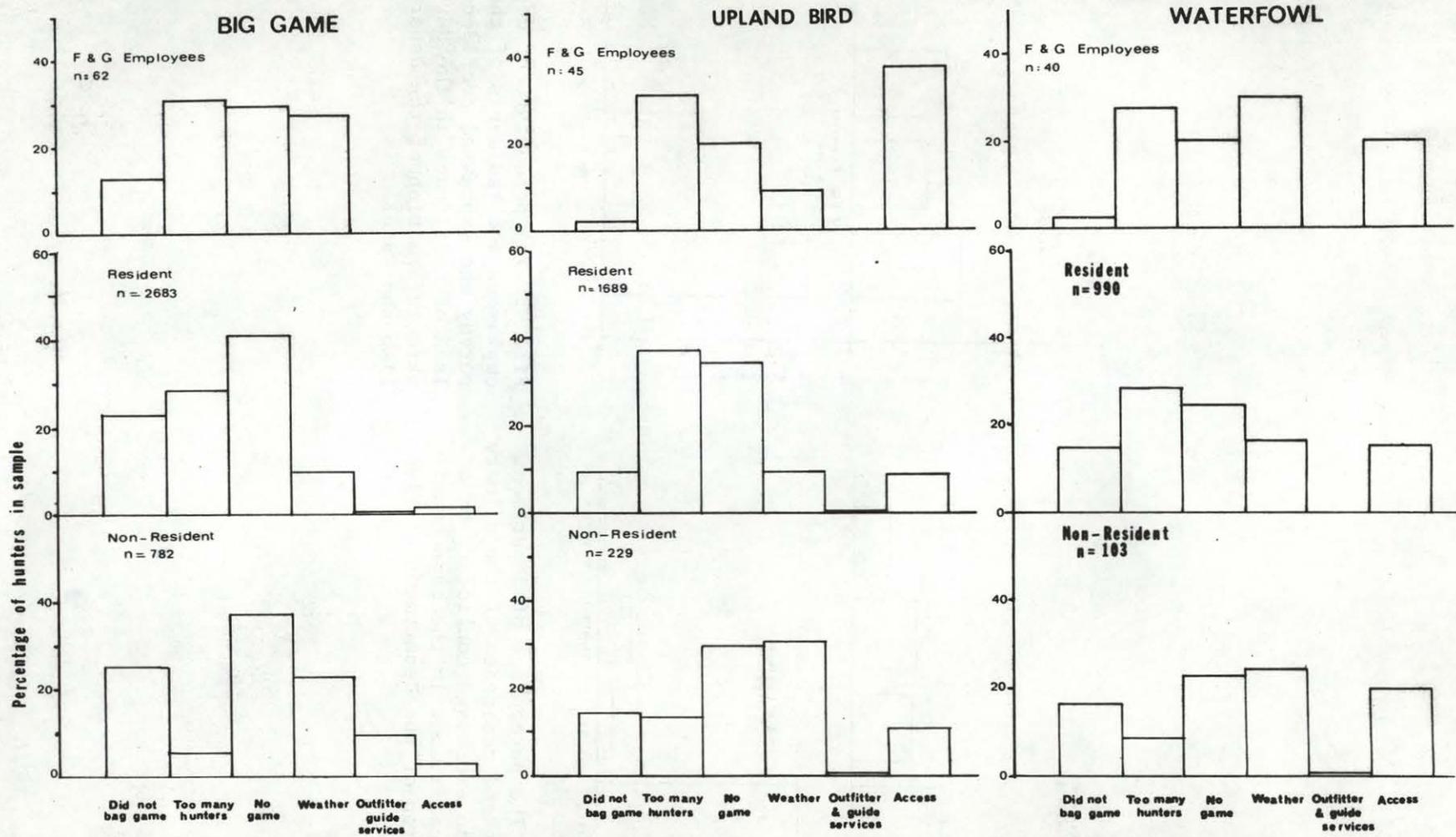


Fig. 7. The percentage of department employees, residents, and non-residents of the primary survey who listed various reasons for their dissatisfaction with hunting in Idaho.

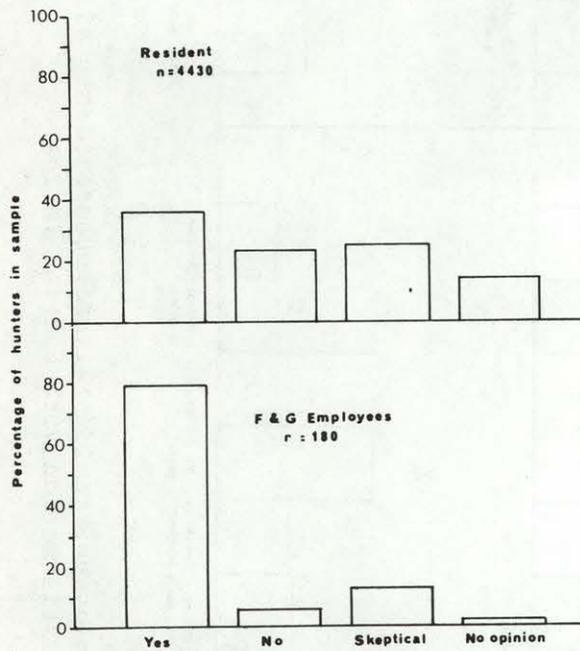


Fig. 8. The percentage of department employees and residents of the primary survey who expressed confidence or a lack of confidence in the game count information of the Department of Fish and Game.

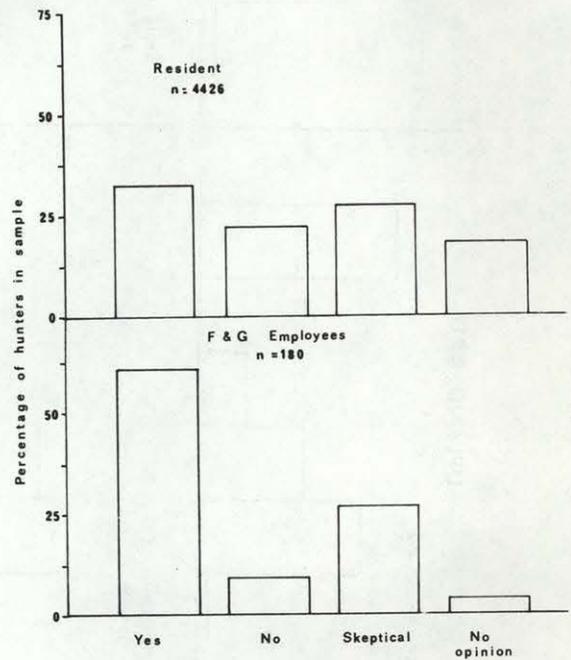


Fig. 9. The percentage of department employees and residents of the primary survey who expressed confidence or a lack of confidence in the harvest estimate information of the Department of Fish and Game.

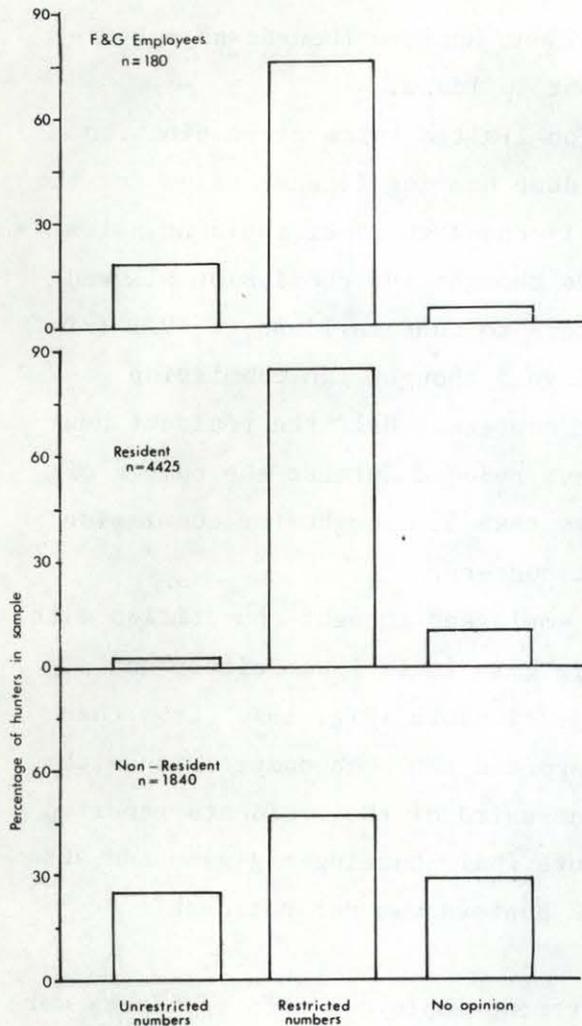


Fig. 10. The percentage of department employees and residents and non-residents of the primary survey who thought Idaho should allow unrestricted numbers of out-of-state hunters or should restrict the number of out-of-state hunters in Idaho.

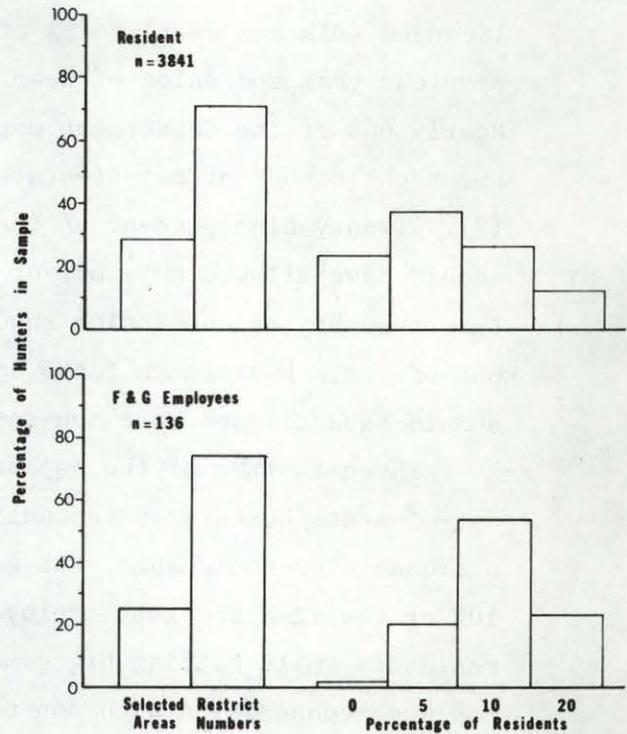


Fig. 11. The percentage of department employees and residents of the primary survey who believed out-of-state hunters should be (1) restricted in number or allowed to hunt only in those areas where residents did not adequately harvest the game and (2) restricted to a percentage of all hunters. The percentage that out-of-state hunters should comprise is listed in the right hand side of the figure.

allowed to hunt only in those areas where residents did not adequately harvest the game. Most residents thought hunters should comprise 5% or less of the total hunters in the state whereas most department employees thought out-of-state hunters should comprise 10% or more of the hunters. A significant number (17%) of the resident hunters thought no out-of-state hunters should be allowed to hunt in Idaho.

The Idaho Fish and Game Commission limited sales of combination licenses (elk and deer) to 5% of resident hunting license sales for the previous year and sales of deer only licenses to 2% of resident sales. Nearly 60% of the department employees thought the commission allowed the right number of out-of-state hunters to hunt in Idaho in 1971 (Fig. 12). Twenty-nine percent of the employees thought the commission should have allowed more out-of-state hunters. Half the resident hunters thought the commission should have reduced further the number of out-of-state hunters in Idaho and less than 5% thought the commission should have allowed more non-resident hunters.

Three-fourths of the department employees thought competition with out-of-state hunters while hunting big game in 1971 was either not noticeable or noticeable, but not objectionable (Fig. 13). Less than 10% of the fish and game employees reported too much competition with residents while hunting big game. One-third of the residents reported too much competition with non-residents while hunting big game and 40% thought competition with out-of-state hunters was not noticeable or least not objectionable.

A larger proportion of the department employees than residents were willing to pay more for hunting licenses or elk and deer tags if the number of non-resident hunters was significantly reduced (Table 3). Department of Fish and Game employees were also willing to pay larger amounts for the licenses or tags than were the residents.

Management of Pheasants

Approximately half the residents and department employees preferred the noon opening time for pheasant hunting in southern Idaho (Table 4). More of the fish and game employees compared to residents preferred an early morning opening time and fewer employees did not have an opinion on the subject.

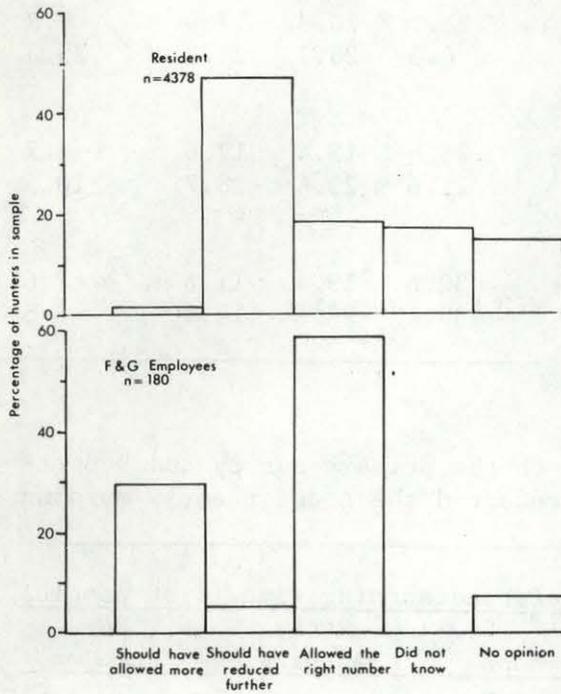


Fig. 12. The percentage of department employees and residents of the primary survey who thought the commission (1) should have allowed more out-of-state hunters, (2) should have reduced the number of out-of-state hunters further, (3) allowed about the right number, or (4) did not know about the restriction on out-of-state hunters.

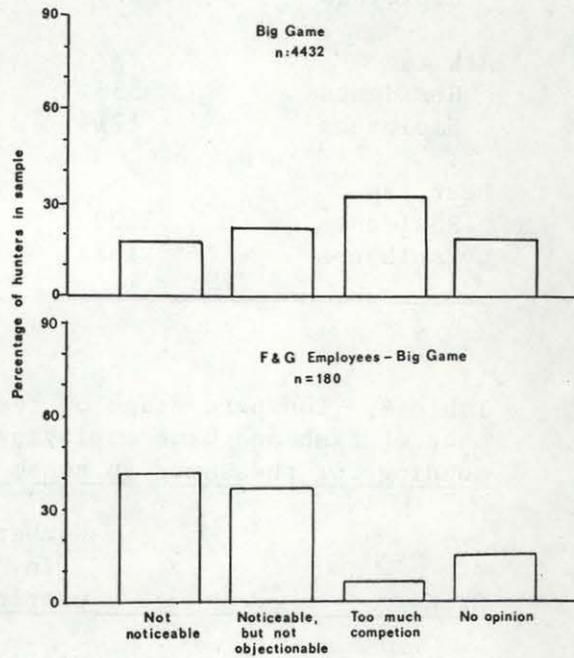


Fig. 13. The percentage of department employees and residents of the primary survey who thought competition with non-resident hunters while hunting big game in Idaho during 1971 was not noticeable, noticeable but not objectionable, or was more competition than they wanted.

Table 3. The percentage of residents in the primary survey and Department of Fish and Game employees who were willing to pay increased fees for hunting licenses and tags if the number of non-resident hunters were reduced and the percentage who were willing to pay specified additional amounts.

License or tag and group	Number in sample	Percentage willing to pay more	Amount willing to pay (% of people)			
			\$1	\$3	\$5	More than \$5
Hunting license						
Residents	3895	69.3	21.7	20.3	17.6	9.8
Employees	174	89.1	6.3	28.7	28.7	25.3
Elk tag						
Residents	3536	71.6	25.9	19.4	17.6	8.7
Employees	171	84.2	21.6	23.4	28.7	10.5
Deer tag						
Residents	3600	70.9	32.6	19.4	11.6	7.6
Employees	168	81.6	30.4	28.6	16.1	6.6

Table 4. The percentage of residents in the primary survey and Department of Fish and Game employees who preferred the noon or early morning opening for pheasants in south Idaho.

Group	Number in sample	Preferred opening time (% of people)		
		Noon	Early morning	No opinion
Residents	4424	47.5	22.1	30.4
Employees	180	50.0	36.1	13.9

Most department employees (76%) thought limited numbers of hen pheasants should be taken by hunters under special regulations, seasons or bag limits. Nearly 20% of the employees thought hen pheasants should be hunted without restriction the same as other game birds, and only 5% thought hens should not be hunted at any time (Fig. 14). A majority of the resident hunters thought a limited number of hen pheasants could be taken but 18% thought hen pheasants should not be hunted at any time.

Seventy-one percent of the department employees compared to only 27% of the resident hunters thought "put-and-shoot" hunting for game farm pheasants was a poor use of license fees and should be discontinued

(Fig. 15). Seventeen percent of the fish and game employees thought providing hunting with game farm pheasants was a good program and should be continued as did 30% of the resident hunters.

Management of Big Game Herds

Seventy-seven percent of the fish and game employees approved of the department's policy on regulating big game numbers and 69% approved of the policy on emergency winter feeding of big game (Table 5). Approximately one-third of the resident hunters approved of the department's policies on regulating big game numbers and emergency winter feeding. Fourteen percent of the fish and game employees and 19% of the residents disapproved of the policy of regulating big game numbers while 24% of the employees and 15% of the residents disapproved of the policy on emergency winter feeding. There was a variation between the occupational groups of fish and game employees in the proportion who approved or disapproved of the policies (Table 5).

Nearly one-third of the residents did not know the department's policy on regulating big game numbers or emergency winter feeding. We did not explain the department's policies on these matters in the questionnaire sent to the resident hunters or department employees, but we did in a special survey (Bjornn, 1975) as listed below.

The current policy of the Idaho Fish and Game Department is to attempt to regulate the abundance of big game animals in each area at the number which natural winter range will support during normal winters. During emergency situations and severe winters the animals will be herded, baited, or live-trapped and moved to areas with natural feed if possible. Emergency winter feeding will be undertaken only as a last resort.

Eighty-eight percent of the fish and game employees and 32% of the resident hunters thought the department should not attempt to increase big game herds in excess of the natural capacity of the winter range (Fig. 16). Half the residents but only 9% of the fish and game employees thought the department should attempt to increase big game herds through supplemental winter feeding.

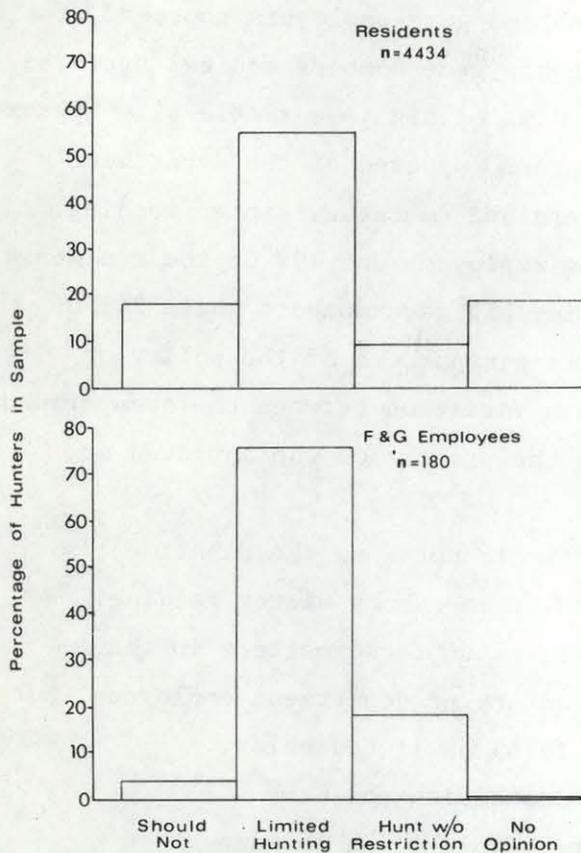


Fig. 14. The percentage of department employees and residents of the primary survey who thought hen pheasants should not be hunted at anytime, that a limited number of pheasants could be taken under special regulations, or that hens should be hunted without restriction the same as other game birds.

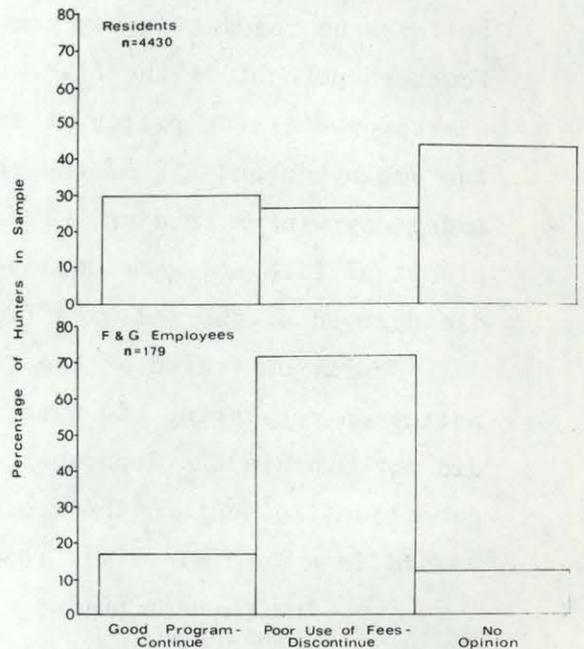


Fig. 15. The percentage of department employees and residents of the primary survey who thought hunting provided by game farm pheasants was a good program that should be continued or that "put-and-shoot" hunting provided with game farm pheasants was a poor use of license fees and should be discontinued.

Table 5. The percentage of residents and Department of Fish and Game employees who approved or disapproved of the department's policy on regulating big game numbers and emergency winter feeding.

Topic and group	Number in sample	% of people who				
		Approved	Dis-approved	Had no opinion	Did not know policy	
Regulating big game numbers						
Residents	4434	31.8	19.4	17.8	31.0	
Department of Fish and Game employees	180	77.2	13.9	6.7	2.2	
Game research & management	28	92.9	0.0	3.6	3.6	
Conservation enforcement	65	76.9	20.0	1.5	1.5	
Refuge and land management	17	76.5	0.0	23.5	0.0	
Information & education	11	100.0	0.0	0.0	0.0	
Fish research & management	19	89.5	5.3	5.3	0.0	
Fish hatcheries	38	52.6	29.0	13.2	5.3	
Emergency winter feeding						
Residents	4430	35.2	14.6	20.1	30.1	
Department of Fish and Game employees	180	69.4	24.4	5.6	0.6	
Game research & management	28	71.4	25.0	3.6	0.0	
Conservation enforcement	65	73.0	21.5	4.6	0.0	
Refuge & land management	17	52.9	23.5	23.5	0.0	
Information & education	11	63.6	36.4	0.0	0.0	
Fish research & management	19	79.0	21.1	0.0	0.0	
Fish hatcheries	38	63.2	29.0	5.3	2.6	

Nearly 90% of the department employees and 57% of the resident hunters thought the amount and condition of vegetation on big game winter range was the proper basis for managing big game herds (Fig. 17). Less than 10% of the fish and game employees and less than 20% of the resident hunters did not think winter range vegetation was the proper basis for management.

Sixty-eight percent of the department employees but only 5% of the residents thought the distribution of supplemental salt for big game was unnecessary and should be discontinued (Table 6). Sixty-one percent of the residents and 18% of department employees thought the distribution of salt for big game was necessary and the program should be continued or expanded.

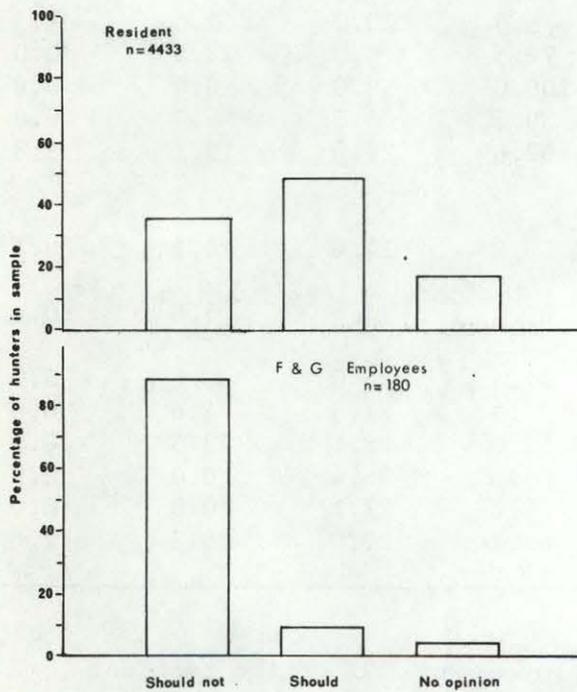


Fig. 16. The percentage of department employees and residents of the primary survey who thought the department should not attempt to increase big game herds in excess of the natural carrying capacity of the winter range or should attempt to increase big game herds through supplemental winter feeding.

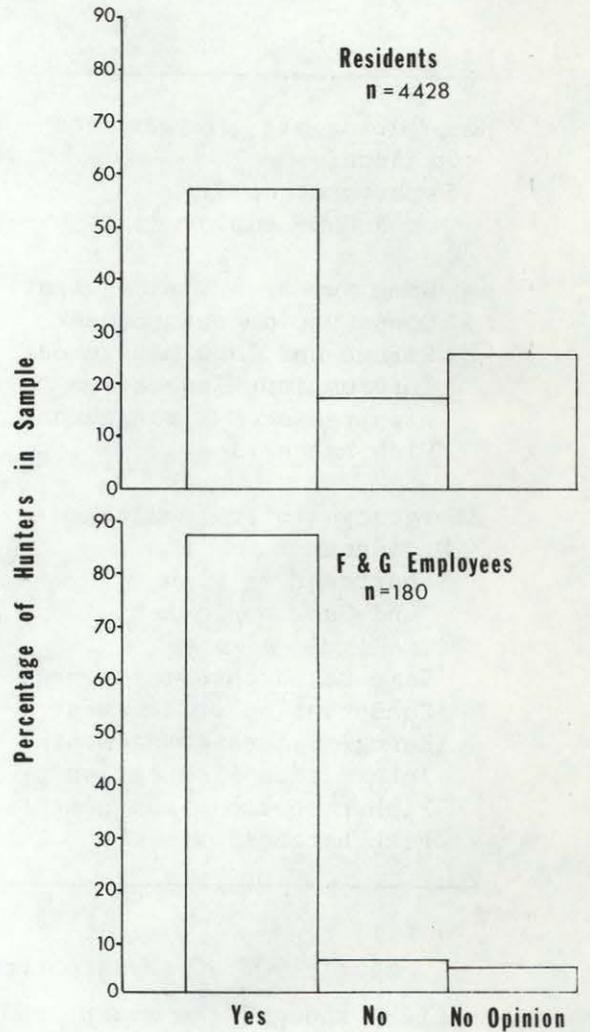


Fig. 17. The percentage of department employees and residents of the primary survey who did or did not believe the amount and condition of vegetation on big game winter range was the proper basis for managing big game populations.

Table 6. The percentage of residents and Department of Fish and Game employees who thought the distribution of supplemental salt for big game animals was or was not necessary.

Group	Number in sample	Views on supplemental salt (% of people)		
		Necessary	Not necessary	No opinion
Residents	4435	60.8	4.9	34.3
Fish and Game Department Employees	180	17.8	67.8	14.4
Game research & management	28	0.0	92.9	7.1
Conservation enforcement	65	20.0	66.2	13.9
Refuge & land management	17	11.8	70.6	17.7
Information & education	11	0.0	100.0	0.0
Fish research & management	19	5.3	73.7	21.1
Fish hatcheries	38	42.1	39.5	18.4

Most department employees (68%) thought some big game herds should be managed to provide quality hunting and some quantity hunting (Fig. 18, refer to Question 15, Fig. 1 for description of "Quality" and "Quantity" hunting). A majority of the residents, with an opinion, preferred to have herds managed for both quality and quantity hunting. A larger proportion of the resident hunters than department employees wanted the herds managed for quality rather than quantity hunting.

In those instances where the deer and elk harvest must be reduced a slightly larger proportion of department employees preferred to restrict the harvest with controlled hunts rather than a shorter general season (Fig. 19). A shorter general season to reduce the harvest of deer and elk was preferred by 47% of the residents and 38% preferred controlled hunts.

When an increased harvest of deer is necessary, 55% of the fish and game employees preferred to provide extra deer tags and allow hunters to take an additional deer and 42% wanted to increase the length of the season (Fig. 20). The largest group of resident hunters (47%) preferred to increase the length of season to increase the harvest of deer and 42% preferred to provide extra deer tags.

Three-fourths of the department employees and resident hunters thought present access to big game hunting areas by roads was adequate and no more roads were needed, or there were already too many roads and

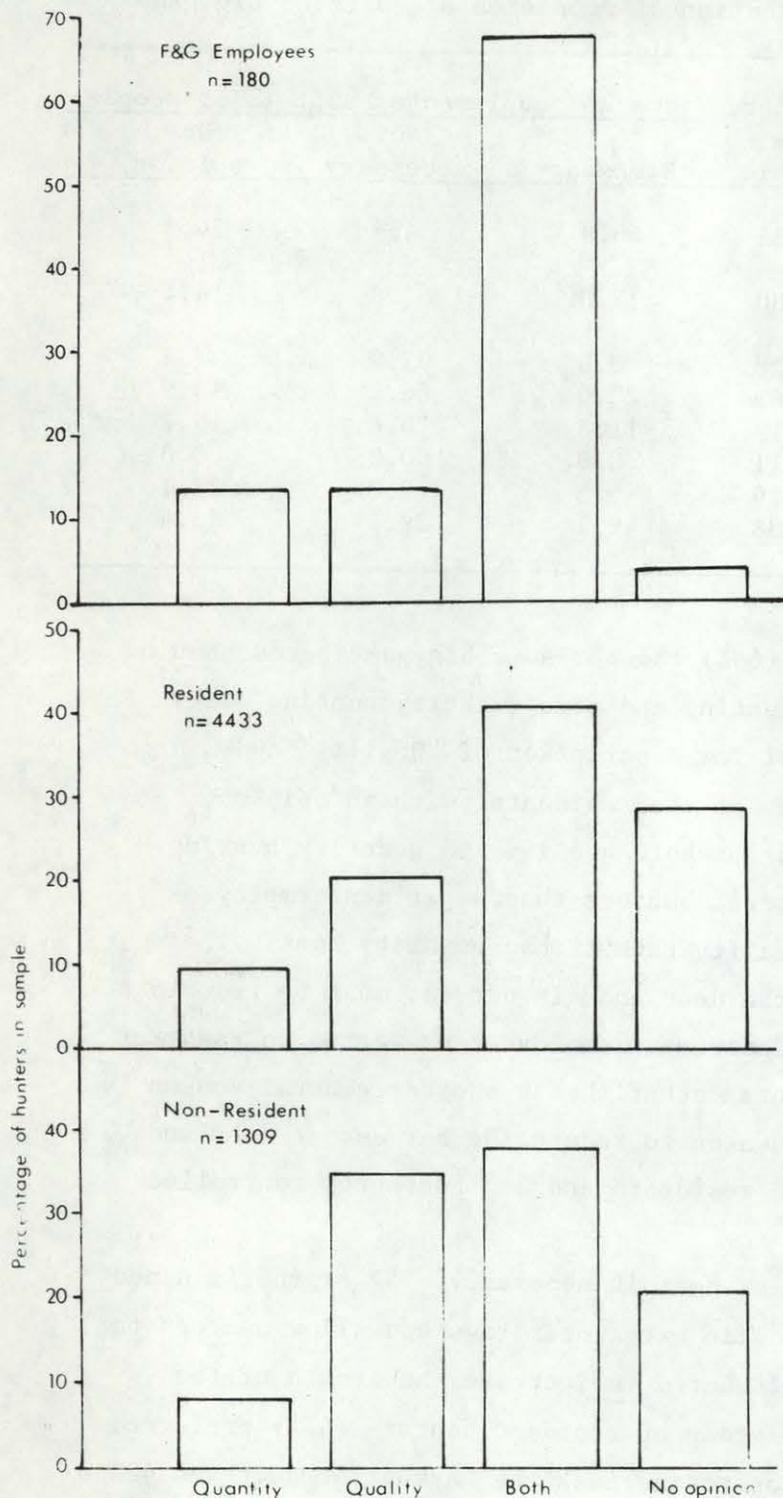


Fig. 18. The percentage of department employees, residents, and non-residents of the primary survey who wanted big game herds managed for quantity, quality or both quantity and quality hunting.

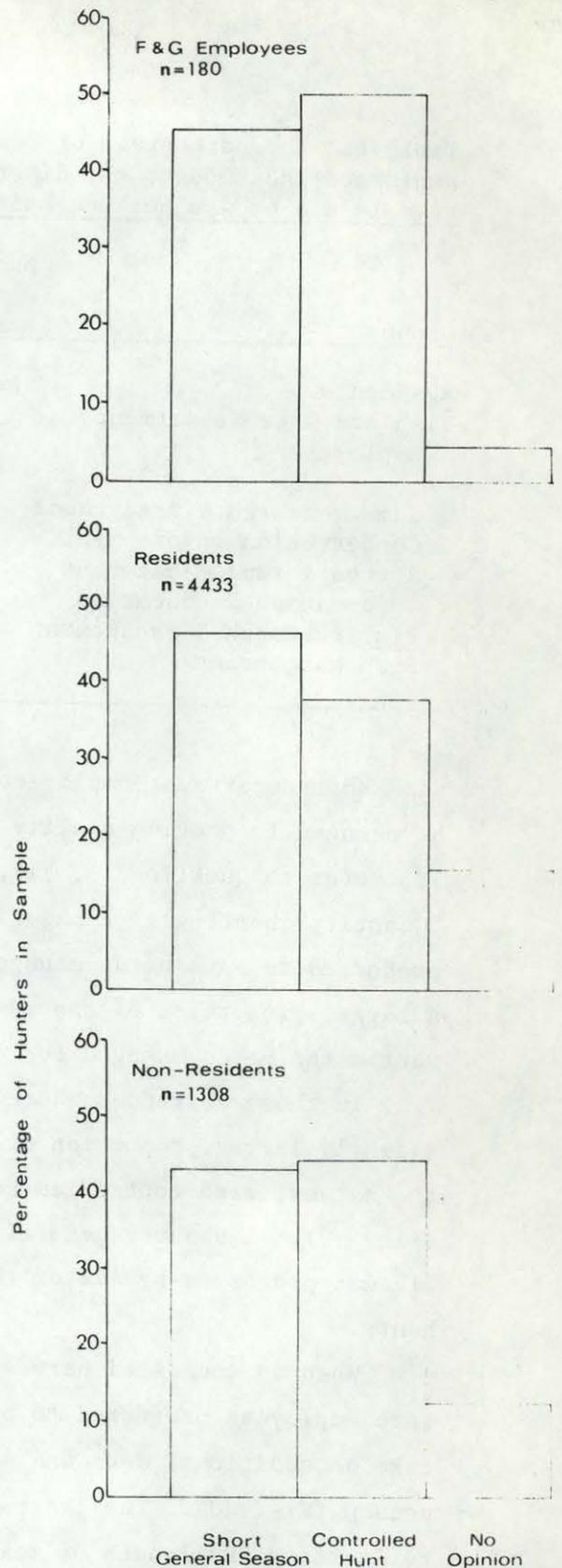


Fig. 19. The percentage of department employees and residents and non-residents who preferred to reduce the harvest of big game animals with a shorter general season or controlled hunts.

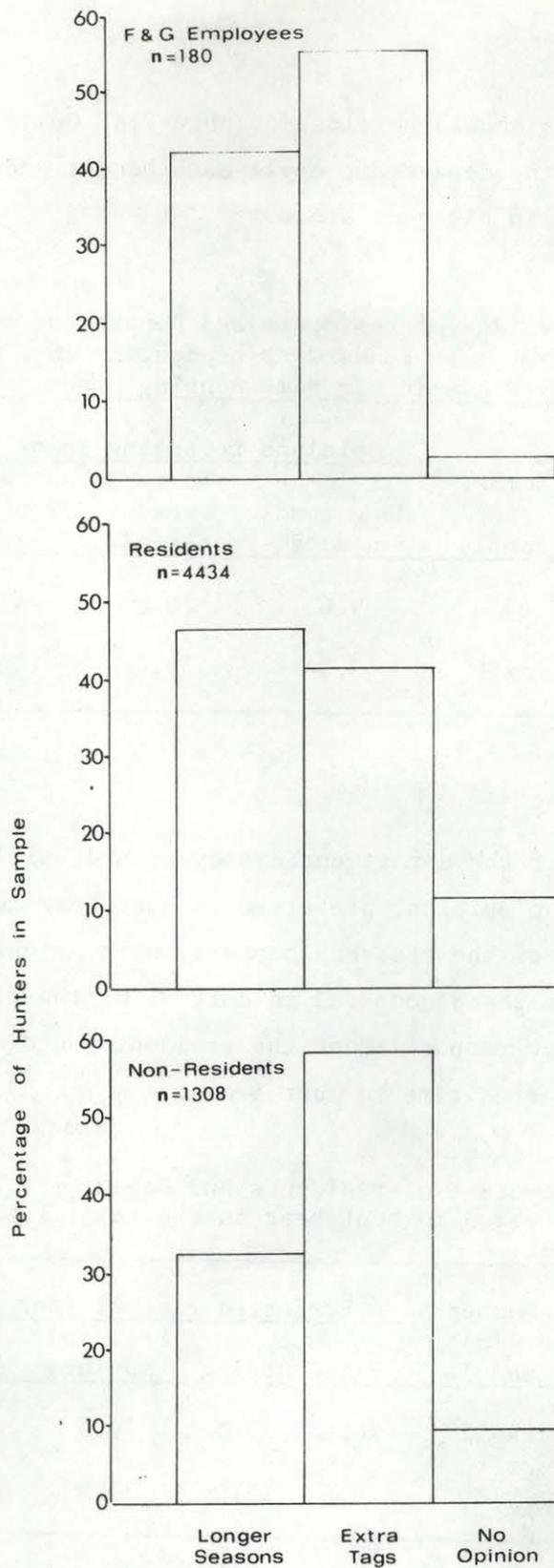


Fig. 20. The percentage of department employees and residents and non-residents of the primary survey who preferred to increase the harvest of deer by increasing the length of the season or providing extra tags so that hunters could take more than one deer.

some existing roads should be closed (Table 7). Only 10% of the resident hunters and 3% of the department employees thought additional roads were needed for hunting in big game areas.

Table 7. The percentage of residents and Department of Fish and Game employees who thought more roads were needed, no more were needed, or there were too many roads in big game hunting areas.

Group	Number in sample	Opinions regarding roads (% of people)			
		More roads needed	No more roads needed	Too many roads	No opinion
Residents	4434	9.6	26.8	47.6	16.0
Employees	180	3.3	39.4	54.4	2.8

Bear Hunting

More than half the department employees and half the resident hunters, who had an opinion, preferred to hunt bear in the fall (Table 8). Nearly one-fourth of the resident hunters, with an opinion, preferred to hunt bear all year round compared to only 3% of the fish and game employees. A large proportion of the resident hunters did not have an opinion on a preferred time to hunt bears.

Table 8. The percentage of residents and Department of Fish and Game employees who preferred to hunt bear in the fall, spring, fall and spring, or all year.

Group	Number in sample	Preferred time of year (% of people)				
		Fall	Spring	Fall and spring	All year	No opinion
Residents	4432	24.6	3.3	6.3	11.9	53.9
Employees	180	40.6	15.0	18.9	2.2	23.3

Considering only those people with an opinion, department employees were evenly split on the question of hunting bears with hounds (Table 9). Most resident hunters (55%) did not think bears should be hunted with hounds but 14% thought the use of hounds should be permitted. Most

residents and fish and game employees preferred to hunt bear with hounds in the fall (Table 9).

Table 9. The percentage of residents and Department of Fish and Game employees who thought bear should or should not be hunted with hounds and when they should be hunted.

Group	Number in sample	Should permit hunting bear with hounds (%)		Time to hunt (% of people)			
		Yes	No	Fall	Spring	Fall and Spring	All year
Residents	4424	13.8	55.0	48.7	12.1	14.8	24.5
Employees	180	41.7	42.2	55.6	14.8	27.2	2.5

Activities of the Department

Forty-one percent of the department employees ranked habitat improvement as the most important activity of the department and 29% ranked acquisition of wildlife areas as the most important activity (Fig. 21). Law enforcement, habitat improvement and emergency winter feeding of big game were the three activities of the Department of Fish and Game which most hunters thought were of primary importance.

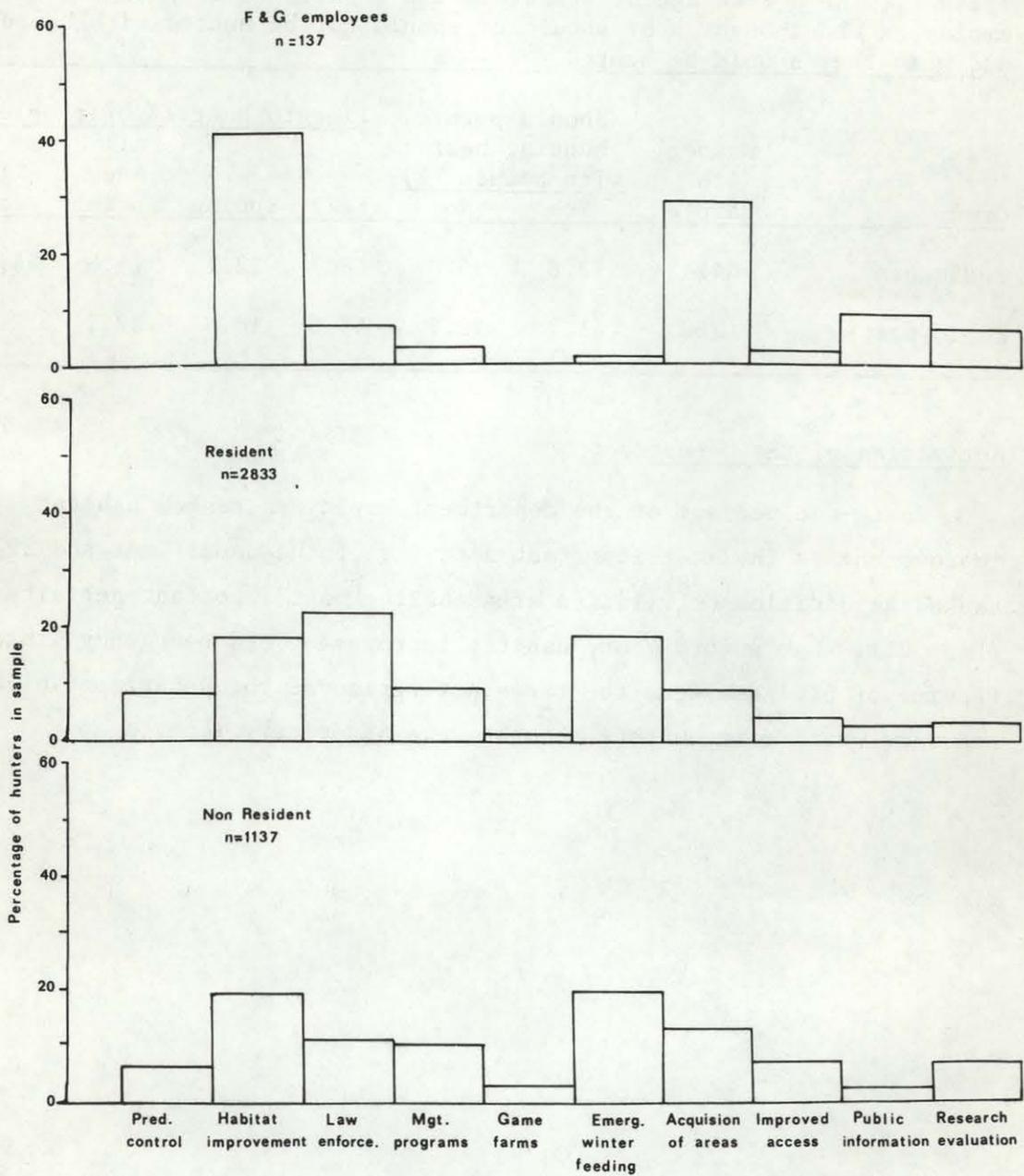


Fig. 21. The percentage of department employees and residents and non-residents of the primary survey who listed various programs as the most important activities of the department.

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