

# CONSERVATION EDUCATION

## A SUGGESTED TECHNIQUE FOR PREFERENCE-RATING SPORTSMEN'S MAGAZINES \*

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Outdoor or conservation magazines have long been held by wildlife education staffs as one of their most effective tools. Reading these magazines, to most people, is a part of their leisure-time activity. As I and E, personnel have realized the great potential of these magazines for teaching wise resource use, they also realize that for magazines to be effective, they must be read. An obvious conclusion is that conservation must be sugar-coated for the reader who reads what he wants to—what he prefers.

While with the Virginia Cooperative Wildlife Research Unit the writer sought to determine the magazines and article-types most preferred by Virginia sportsmen to serve as a guide for more effective conservation education. The results of this study not only revealed the magazines and article types most preferred but allowed a technique for preference-rating magazines to be devised.

A two-page questionnaire with letter of introduction was sent to the presidents of Virginia sportsmen's clubs having 50 or more members. A 47.3 percent response was received. The questionnaire asked the men to rate a list of magazines on the basis of (1) order of preference and reasons for this preference, (2) article types most preferred and the reasons for this preference, and (3) writing styles most preferred.

Those contacted were asked to rank by the use of "1, 2, or 3" the three most preferred magazines from a list of 20 outdoor or conservation magazines. Spaces were also provided for "no opinion" and "I read no outdoor magazines." Following this section was a list of 16 possible reasons for preferring magazines. The same "1, 2, or 3" rating was requested for this section. Thirteen article types were listed with the same rating procedure requested. The same list of reasons for preference followed this article-type section. The final section of the questionnaire requested those contacted to indicate their first, second, and third preference of writing style.

The frequency (F's) of the indicated preferences, "1, 2, or 3", was tabulated and the percentage of the 44 possible indications was calculated. Fifteen people indicated *Virginia Wildlife* as their first preference. For example:  $15 \div 44 = .3409 \times 100 = 34.09$  percent. Each percentage was then weighted, *i. e.*, systematically multiplied by a factor to give each percentage of preference a logical numerical relationship with other preferences. Each first preference percentage (P<sub>1</sub>) was given a weight of 3; every second preference percentage (P<sub>2</sub>), 2; and every third preference percentage (P<sub>3</sub>) was given the weight of 1.

The *Virginia Wildlife* preference percentage for first choice, 34.09, was given a weight of 3, thus 102.27; its second choice percentage, 29.55, was weighted with 2, this being 59.1; the third choice percentage weighted 1, remained the same, 11.4. An arithmetic mean of these percentages was calculated for each magazine. This average, the Preference Factor (PF) is a numerical expression of the preference of sportsmen for a magazine since it represents all of the variables for each response.

The mathematical expression and derivation for this process of obtaining Preference Factors (PF's) is:

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Letting  $F_1$  = Frequency of first preference indication  
 $F_2$  = Frequency of second preference indication  
 $F_3$  = Frequency of third preference indication  
 $T$  = Total possible indications for each response  
 $P_1$  = Percentage of first preference  
 $P_2$  = Percentage of second preference  
 $P_3$  = Percentage of third preference  
 $W_1$  = Weight given to first preference (3)  
 $W_2$  = Weight given to second preference (2)  
 $W_3$  = Weight given to third preference (1)

and since

$$\frac{F_{1,2,3}}{T} \times 100 = P_{1,2,3}$$

then  $P_{1,2,3}$  weighted  $W_{1,2,3} = P_{1,2,3} W_{1,2,3}$

The average of these weighted percentages is then obtained by

$$\frac{P_1 W_1 + P_2 W_2 + P_3 W_3}{3} = PF$$

Comparable calculations were made for article type, writing styles, and reasons for article preference.

The preceding calculations indicated 13 most preferred article types. Upon these article types a rating procedure was developed. A form shown in Table I was prepared for rapid Preference Rating of sportsmen's magazines. The steps and their derivations are outlined as follows:

#### *Step 1*

List the types of magazine articles in the magazine to be rated. (See Table I, a recommended form.) The types of magazine articles are taken from the questionnaire. Data is available from the study to indicate the preference of each article type.

#### *Step 2*

Go through the magazine to be rated, putting as many articles in the 13 listed classes as possible. See that all articles are placed in a category.

Because Step 1 is based on the article types ascertained as preferred by sportsmen, those not fitting these categories should be grouped and included under "no classification." The more of article types 1 through 13, the higher will be the magazine Preference Rating.

#### *Step 3*

Again go through the magazine to be tested, counting the column-inch length of each article type. This step is an attempt to add objectivity to the rating. The considerations of magazine cover, paper, printing, pictures, color writing style, and make-up are largely subjective. These factors play a definite part in the preference shown for a magazine, however, Preference Rating, as such, makes no attempt at evaluating these factors.

#### *Step 4*

Total the column-inches.

#### *Step 5*

Calculate the percentage of each type of article by dividing the column-inches per article by the total column-inch length of the magazine.

$$\text{As: } \frac{C}{T} \times 100 = P$$

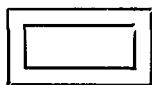
when C is the column-inch length per article type, T the total column-inch length of the magazine, and P the percentage of each article type.

TABLE I  
RECOMMENDED FORM FOR PREFERENCE-RATING SPORTSMEN'S MAGAZINES

Preference-Rating of \_\_\_\_\_ (Name of Magazine) \_\_\_\_\_ (Issue)

Step 1	Step 2	Step 3&4	Step 5	Step 6	
List of Article Types	Article Classification (by First Page Numbers)	Column Inches	Percent Each Article	Divide by	Results
1. True tales of hunting and fishing				25	
2. Short articles on animals . . . . .				13	
3. On places and places to go . . . . .				11	
4. How-to-do-it . . . . .				9	
5. Features—boats, guns, dogs . . . . .				9	
6. Editorials . . . . .				7	
7. Outdoor fiction . . . . .				6	
8. Animal stories . . . . .				5	
9. News notes . . . . .				4	
10. Research articles . . . . .				3	
11. Picture stories and features . . . . .				3	
12. Camping stories . . . . .				3	
13. Foreign hunting and fishing . . . . .				2	
14. No classification . . . . .				1	
TOTALS . . . . .				100	

Divide the total of the results of Step 6 by .13.



\_\_\_\_\_ = Preference-Rating of Magazine  
.13

*Step 6*

Divide each P by the corresponding factors in column 5 of the suggested form.

The factors in column 5 are percentages of the sum of the Preference Factors, the PF's (as previously calculated) of the article types. For example: "True tales of hunting and fishing" contributed a PF of 56.8 to the total PF of 223.5 for all 13 article types.

$$\frac{56.8}{223.5} \times 100 = 25.4 \text{ or } 25$$

*Step 7*

Total the results.

*Step 8*

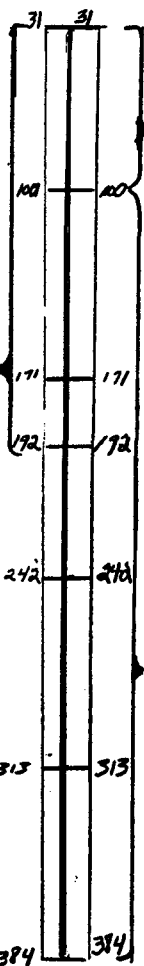
Divide the results by 13. The figure obtained is the Preference Rating (PR) of the magazine under inspection.

INTERPRETATION OF PR

Magazine Preference Ratings will range from 31 to 384. (See Table II.) A rating of 100 will indicate a magazine of optimum sportsman preference. Magazines having a PR of 100 or close to 100 are magazines that will be most preferred by the greatest number of readers. A rating of 31 indicates that 100

TABLE II  
A COMPARISON SCALE FOR PREFERENCE-RATINGS OBTAINED FROM  
SPORTSMEN'S MAGAZINES

100 percent articles in *the*  
most preferred article type



67 percent articles in the five  
most preferred article types

Optimum sportsman  
preference

89 percent of articles in the  
five most preferred article  
types

As PR's increase from 100  
to 384 higher percentages of  
articles are less preferred

100 percent of articles in the  
least preferred article type

percent of the articles are in the most preferred article type. A PR of less than 100 indicates that 67 percent or more of the articles fall in the five most preferred article types. Such a magazine is preferred and one that will "sell." However, this PR also indicates that the magazine is neglecting a part of a possible reader audience by omitting small amounts of articles that appeal to a segment of the magazine readers. A PR in the range of 31 to 192 indicates that 89 percent or more of the articles of the magazine fall in the greatest preference group of article-types.

A PR greater than, but close to 100, indicates a more preferred magazine having many articles in the "less preferred" category. As the PR approaches 384 (100 percent of the articles in the least preferred type) higher percentages of articles fall in the least preferred types. Magazines slanted to specialized reader groups will most frequently have PR's on the extremes of the scale.

## SUMMARY AND CONCLUSIONS

In a questionnaire survey of the presidents of larger Virginia sportsmen's clubs, preference and reasons for preference were obtained for sportsmen's magazines, articles, and writing styles.

A technique employing percentage of magazine volume in preferred article types was devised for preference rating magazines.

Further experimental use of the technique is recommended. Substitution of other state wildlife magazines can probably be made for *Virginia Wildlife* with little effect on the rating scale.

It is essential that the men and women of America know and practice the wise use of their resources. "Wise" use implies knowledge and this must be gained from reliable and readily available sources. The outdoor and conservation magazine is a popular, effective approach to many citizens. By channeling conservation principles and information through preferred types of articles and by making total magazine content more preferred, conservation educators can increase their effectiveness—both in number of people contacted and the changes caused in them by the contact. *Effectiveness of an attempt at conservation education is a product of the number of people contacted and the positive change that occurs in them as a result of the education.*

## PROBLEMS OF CONSERVATION EDUCATION IN THE NEW AGE

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We who are working in the field of conservation education have many problems.

In analyzing the problems which are most pressing at the moment, we find that the majority of the serious ones are brought about by the new age in which we are now living.

These problems brought by our new age are, in fact, so large, so unusual, so ominous, that they envelop us. They are so all-pervading that we have difficulty in seeing them clearly and, indeed, we are not always conscious that such problems even exist.

Let's take a brief look at 11 or 12 of these problems:

Our population is exploding. We use tin-can communications. Our hook is unbaited—no modern sales-psychology. We should be cashing in on the glory of the rocket technicians. We use soft scattershot instead of selective penetration. We keep working in the past, instead of the future. Our public is on wheels. We hesitate to tell the truth. We are not preparing our people for 1965. We hug our responsibilities while refusing to wear the mantle of authority. Our little conservation crusade is overshadowed by international cold wars. We do not plan for the first zoo on the moon.

You remember the story about the man climbing up out of the ditch—for each step up, he slid two backward. And then a friend told him to turn around, and walk up backwards.

Our current population explosion is the ditch of our conservation education efforts in the new age. We often forget that more people are born each day than we can educate in that day.

The fact is that the United States, and, indeed, the entire world, is now involved in a great population explosion of a magnitude never before known in human history. Let us look at some of the net increases of population in the United States.

In the year 1900, we had slightly more than 76 million people in this country. In the next 25 years, by 1925, the population increased more than 50 percent to a total of nearly 116 million. Twenty-five years later, in 1950, our population