

Membership Publishing Behavior and Attitude Toward ASHS Publications

M. N. Westwood, A. A. De Hertogh, and D. Kretchman
ASHS Publications Committee

Conflicting opinions have been expressed for a number of years about the use, effectiveness, and cost of *HortScience* and the *Journal*. Because of the importance of these publications, the Publications Committee decided to conduct a survey of the membership to get a more complete picture of member views and to obtain some solid facts regarding the publishing behavior of different classes of members.

The survey was conducted as a mail-out questionnaire; technical construction and computer analysis was done with the help of Dr. Robert Mason and Helen Lowry of the Survey Research Center, Oregon State University. Total Society membership is 2978. A total of 2361 questionnaires were mailed out to members in North America and 1624 (69%) were returned.

As with any questionnaire, the results are only as clear as the questions asked. Some poorly worded questions resulted in unclear responses. Some important questions were not asked. One such question, regarding the *usefulness* of ASHS publications to readers, was inadvertently omitted from the final draft, for which we apologize.

Membership

Various classifications of membership are presented in Table 1. Members have been in the Society from 0 to 72 years, the average being 14.8 years. When broken into 5-year increments, there are more new members in recent years than for a similar period 5, 10, or 15 years ago. Yet 45% have been members for more than 15 years.

Members other than regular members amount to 21% (Table 1). Only 7% are associate members. This datum indicates we have failed either to attract or to hold this class of member.

Most members (64%) have no formal administrative responsibility and only 10% have more than 60% administrative duties (Table 1).

Academic rank shows an uneven distribution, with 23% of the members at professor, 10% at associate, and 7% at assistant (Table 1). These data indicate that younger members of the profession

are not members of ASHS in proportion to their numbers. Efforts should be made to correct this situation.

More than half the members have PhD degrees and 86% have advanced degrees (Table 1). The average time since final degree was awarded is 15.7 years.

More than 70% of the members are employed in academic, state and federal agencies, while 22% are industry or self-employed (Table 1). Members tend not to change jobs often, with the average time worked for the present employer being 13.4 years. This job stability should reflect favorably on the number of papers published.

Members average 44% of their time spent in research, with 43% spent in teaching, extension and administration combined (Table 1). The low % extension indicated for the membership indicates that the Society is not attractive to that large group of horticulturists.

Commodity interest areas were almost equally divided among vegetables, fruits and nuts, and ornamentals. The totals here add to more than 100% because some members marked more than one crop area (Table 1).

Of the disciplinary areas, 58% are working in culture and physiology, 21% in breeding and 12% in post-harvest (Table 1). Quite a number (24%) listed disciplines other than the 3 listed above.

Publishing habits

The publishing habits of members show that a large number do not publish (Table 1 and Fig. 1). It is significant that 57% of the members published nothing in the 2 Society publications during a 5-year period (Fig. 1). About 9% of the members published more than 1 paper per year. Also 40% of the members published nothing in any journal in 5 years (Table 1). In an independent survey done by Dr. John Carew, Michigan State University, it was found that during 4 years only 18% of the members published anything in the *Journal*, and only 19% had published 1 or more times in *HortScience*. These data *per se* are not necessarily bad. They merely indicate that most members are

primarily readers of Society publications, rather than authors.

Question 3 asked whether we should put all kinds of research articles (including notes, symposia, etc.) in one publication; 56% opposed such a suggestion (Table 2). Of those who favored it, 75% suggested the *Journal* as the vehicle for all research papers. There were several significant differences in the way different membership classes answered question 3. For example more non-administrators favored 2 journals than did administrators.

Question 12 asked if we should have expanded abstracts in place of regular articles. A majority (58%) opposed this, but a surprising 39% favored it (Table 2).

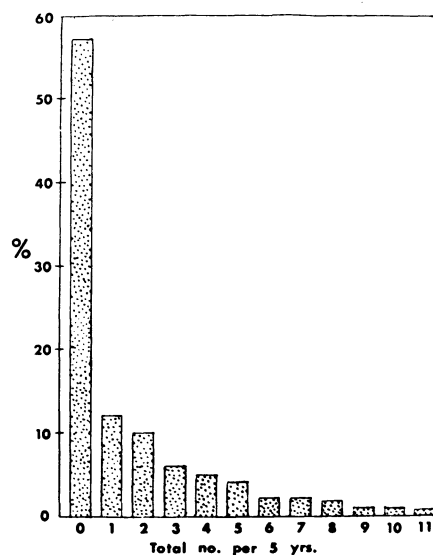
Question 11 asking if we should reduce dues to members not wanting to subscribe to *HortScience* and the *Journal* was about equally split between "favor" and "oppose," with some classes of members deviating from this split (Table 2). Such a move would reduce somewhat the total number of copies to be printed, but it might attract some new members.

Question 4 asked whether *HortScience* or the *Journal* was more appropriate for 6 categories of published material. Most members wanted all major research articles in the *Journal* but favored *HortScience* for brief research notes and the other types of information (Table 3). While different membership classes voted differently on some questions, none of these differences resulted in a reversal of the majority vote for the group as a whole. The vote for major articles in the *Journal* and brief notes in *HortScience* is largely the division which was originally intended when *HortScience* was established.

Questions 5, 6 and 7 dealt with the number, kind, and place of publication of articles written by members. Members averaged .84 refereed paper per year, including journals other than ASHS (Table 4). But members averaged .17 research paper in *HortScience* and .14 in the *Journal* each year. Thus most of the research being published by members is in publications other than those

Table 1. Explanation of membership classes and percentage of members in each group.

Breakdown by group	% in group
Q1 <i>Years as a member</i> (N=1621)	
0 to 4	21
5 to 9	18
10 to 14	16
15 to 19	12
20 or more	33
(Average membership = 14.8 years; range = 0 to 72 years)	
Q2 <i>Class of member</i> (N=1622)	
1. Regular	79
2. Other	21
a. Associate (7%)	
b. Student (10%)	
c. Emeritus (4%)	
Q5,6,7 <i>Publisher class</i> (N=1563)	
1. Publishes in ASHS plus other publications (ASHS & other)	33
2. Publishes only in other publications (other)	19
3. Publishes only in ASHS publications (ASHS)	8
4. Does not publish (none)	40
Q16 <i>Administrative class</i> (N=1617)	
1. No administration	64
2. 1–30% administration	18
3. 31–60% administration	8
4. 61–100% administration	10
Q19 <i>Rank or title class</i> (N=1582)	
1. Professor	23
2. Lower academic ranks	23
a. Associate (10%)	
b. Assistant (7%)	
c. Instructor (1%)	
d. Graduate teaching or research assist. (5%)	
3. Other	54
a. Administrator (13%)	
b. Research scientist (16%)	
c. Horticultural specialist (15%)	
d. Self-employed, business (2%)	
e. Others (8%)	
Q13 <i>Academic training</i> (N=1616)	
PhD degree	62
MS or MA degree	24
BS degree	12
None	2
Years since degree was awarded, 15.7	
Q14 <i>Present employer</i> (N=1622)	
College or University	59
Private industry	16
Federal agency	9
Self-employed	6
State agency	5
Retired	4
Private foundation	1
Unemployed	0.6
Q15 (Years worked for present employer, 13.4; range = 0 to 52 years)	
Q16 <i>Organizational type of work</i> (N=1624)	
Research	44
Administration	16
Extension	14
Teaching	13
Other	12
Q17 <i>Crop area of interest</i> (N=1624)	
Vegetable crops	36
Fruits and nuts	35
Ornamentals	32
Cross-commodity	15
Other	10
Q18 <i>Horticultural discipline</i> (N=1624)	
Culture and physiology	58
Breeding	21
Postharvest physiology	12
Other	24

Fig. 1. Percentages of ASHS members who published no papers, 1 paper, 2 papers, etc., during a 5-year period in the *Journal* and in *HortScience* combined.

4). Academic members published more papers than others, and professors pub-

lished more than did lower ranks.

Members attended annual meetings and presented papers at these meetings in about equal proportion. The average member attended 1.6 meetings per 5 years, while the most active publisher class attended 2.3 meetings per 5 years. The highest attendance for any class was only about once each 2 years (Table 4).

Written responses to question 20 are grouped into 3 categories: A. General comments about the publications, B. Comments on the content of the 2 publications, and C. Specific comments about the *Journal* or *HortScience* (Table 5). The descriptive items under each of the 3 headings were not predetermined but were designed to help classify the written comments of members. Many of the comments reinforce answers given to specific other questions in the questionnaire, while others touch on new topics. The considerable contradiction seen in these comments reflects the diverse opinions of Society members on these issues. It probably also reflects the overall diversity of Horticultural Science.

Table 2. Q3. A recommendation has been made that all research articles (major articles, notes, symposia, etc.) be published in *one* Society publication. Do you favor or oppose this recommendation?

Q3a. Should all research articles be published in the <i>Journal</i> (J) or in <i>HortScience</i> (HS)?	
Q11. Some scientific societies offer an option for members to receive none, some or all of the publications the society publishes – with dues proportional to the number of journals received. Do you favor or oppose ASHS reducing dues to members who do not wish to receive Society publications and giving members the option of paying extra if they wish to receive publications?	
Q12. A suggestion has been made that, to cut costs and to streamline the <i>Journal</i> , the Society should not print long research articles and instead shift to printing expanding abstracts of research work that are a half printed page or less in length. The articles would be reviewed as they have been in the past, and those interested in securing the complete article would receive a copy by writing to a Society office where copying services would be available. Would you favor or oppose this change in the <i>Journal's</i> content?	

Grouping	Q3-Put all ² res. art. in 1 publication		Q3a-If favor Q3, then put all research articles in:		Q11-Reduce dues for those not wanting public		Q12-Print only expanded abstracts in the ASHS Jour.	
	Favor	Oppose	J	HS	Favor	Oppose	Favor	Oppose
Membership class:								
Regular	43	57	79	20	44	56	39	61
Other	43	57	65	32	53	47	46	54
	X ² =NS ²		X ² =11.22**		X ² =8.11**		X ² =6.24*	
Publisher class:								
ASHS & other public.	36	64	86	13	45	55	30	70
Other public. only	47	53	76	23	50	51	40	60
ASHS public. only	32	68	81	12	45	55	44	56
Neither (don't pub.)	50	50	69	29	45	55	49	51
	X ² =31.51**		X ² =29.58**		X ² =NS		X ² =45.82**	
Administrative class:								
None	41	59	76	22	45	55	39	61
1–30%	45	55	76	22	51	49	43	57
31–60%	45	55	78	18	51	49	44	56
61–100%	49	51	72	27	36	64	42	58
	X ² =NS		X ² =NS		X ² =11.31**		X ² =NS	
Rank class:								
Professor	43	57	84	13	44	56	33	67
Assoc., Asst., Inst.	32	68	76	23	50	50	38	62
Other	46	54	73	25	46	54	43	57
	X ² =17.63**		X ² =NS		X ² =NS		X ² =9.83**	
All members	42	56	75	22	45	53	39	58
	(Other 2)		(Merge 2)					

²Chi square (X²) tests indicate whether categories of a given group are different. *=(.05). **=(.01). NS indicates "not significant."

of ASHS. The publishing habits of different member classes differed significantly in most categories (Table

Table 3. Q4. A number of different types of articles as well as other information about the Society are published in either *HortScience* (HS) or *Journal* (J). Please indicate below which publication, if any, is most appropriate for the presentation of the following kinds of information.

Grouping	ASHS publication most appropriate for publishing:											
	4a Major research articles		4b Brief research notes		4c Reviews, features sympo- sia		4d Announce- ments, news, perso- nnel notes		4e Book reviews		4f Employ- ment opportu- nities	
	HS	J	HS	J	HS	J	HS	J	HS	J	HS	J
Percent of members in each group ²												
Membership class:												
Regular	6	85	69	21	65	20	84	6	79	9	80	6
Other	11	75	67	21	63	18	80	6	72	13	74	9
X ²	**	**	NS	NS	NS	NS	NS	NS	*	*	*	*
Publisher class:												
ASHS & other	3	88	70	22	69	18	86	4	81	8	82	4
Other	8	84	67	24	65	22	83	7	78	11	80	7
ASHS	2	85	73	15	61	20	82	2	79	4	79	2
None	11	79	65	20	61	21	80	8	74	12	75	9
X ²	**	**	*	*	NS	NS	**	**	*	*	**	**
Administrative class:												
None	6	83	69	20	67	18	84	5	78	9	79	6
1 to 30%	6	88	66	25	61	25	79	9	74	11	78	9
31 to 60%	6	83	68	22	60	23	81	8	78	9	79	8
61 to 100%	10	78	69	17	64	22	83	6	78	10	82	5
X ²	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Rank class:												
Professor	4	89	74	20	63	22	85	4	80	8	82	5
Assoc., Asst., Inst.,	4	84	71	20	70	15	86	4	81	7	81	4
Other	8	81	65	22	64	20	81	7	76	11	77	8
X ²	**	**	**	NS	NS	NS	NS	NS	NS	NS	NS	NS
All members	6	78	64	20	61	19	78	6	72	9	72	6

²The total percentages for *HortScience* and *Journal* in each group do not add to 100 because those choosing "both," "Neither" and "Other" are not included.

Table 4. Q5. In the past 5 years, how many refereed articles have been published in a journal of a recognized professional society or in an official publication series of a research agency in which your name has appeared as an author?
Q6. In the past 5 years, how many major research articles (more than one page), if any, have been published in either *HortScience* or the *Journal* in which your name has appeared as an author?
Q7a. Now, in the past 5 years, how many brief research articles (one page or less), if any, have been published in *HortScience* in which your name has appeared as an author?
Q7b. In the past 5 years how many articles, other than research articles, have been published in which your name has appeared as an author?
Q9. Within the past 5 years, how many papers have been presented at meetings of the Society in which your name has appeared as an author?
Q10. How many annual meetings of the Society have you attended in the past 5 years?

Grouping	No. papers and articles published in 5 years: ²					Meetings in 5 years	
	Q5 Total refereed papers	Q6 Major papers in HS	Q6 Major papers in J	Q7a Brief articles in HS	Q7b Non-research articles in HS	Q9 No. papers presented at meetings	Q10 No. ASHS meetings attended
Membership class: (N=1620)							
Regular	5.0a ²	0.7a	0.9a	0.3a	0.2a	1.5a	1.8a
Other	1.2b	0.1b	0b	0.1b	0b	0.4b	0.8b
Publisher class: (N = 1563)							
ASHS & other	9.8a	1.5a	1.8a	0.5a	0.3a	2.4a	2.3a
Other	4.4b	0c	0c	0b	0.1b	1.0c	1.4b
ASHS	2.7c	1.0b	1.3b	0.4a	0.2ab	1.8b	2.2a
None	0d	0c	0c	0b	0.04c	0.2d	0.9c
Administrative class: (N=1617)							
None	4.2b	0.6a	0.8a	0.2a	0.1a	1.4a	1.6a
1 to 30%	5.4a	0.7a	0.9a	0.2a	0.2a	1.5a	1.7a
31 to 60%	3.4bc	0.4b	0.7a	0.2a	0.2a	1.0b	1.6a
61 to 100%	2.7c	0.2c	0.3b	0.2a	0.2a	0.5c	1.5a
Rank or title class: (N=1575)							
Professor	7.4a	1.1a	1.3a	0.3a	0.3a	2.0a	2.2a
Assoc., Asst.,							
Inst.	4.8b	0.8b	1.0b	0.3a	0.1b	1.9a	2.0a
Other	3.0c	0.4c	0.5c	0.2b	0.1b	0.8b	1.2b
All members	4.2	0.6	0.7	0.23	0.15	1.3	1.6

²Statistical evaluation was by "t" tests of means within a group. For a given group, two means are significantly different if they are followed by different letters.

Discussion

The fact that associate members comprise only 7% of the total indicates that the Society should re-examine its position on this class of membership. The purpose for having the associate member was to attract a large number of non-publishers such as industry fieldmen, county extension agents, vocational-ag teachers and commodity producers who would get *HortScience* only, with a lower dues rate. It was hoped that *HortScience* would provide sufficient practical, extension-oriented material that would interest a substantial group of horticulturists who often would not be interested in the primarily research-oriented articles in the *Journal*. Some of the reasons given for dropping associate membership have been that the material published in *HortScience* is not practical or extension oriented, that dues are too high and escalating, and that page charges prevent their publishing extension type articles in which no budget exists to pay such charges. Some of the alternatives for Society action are:

1. Re-structure *HortScience* to be more attractive to associate members.
2. Abandon the associate class of membership and make no pretense of serving that group.
3. Continue the present policy but with more attention to *HortScience* content relevant to associate members.

The question of where to publish different kinds of material was considered in Q4 (Table 3). The survey indicated clearly that major research articles should be in the *Journal* and that brief research notes and all other items should be in *HortScience*. This view is in line with the original intent when *HortScience* was initiated. At that time (1966), it was recognized that more frequent communication was needed than the twice-yearly publication of the *Proceedings*. Also the Society felt that recent developments in education, industry, and international affairs should be reported in *HortScience* along with various types of Society news and business. Also *HortScience* was to be a vehicle for other information deemed inappropriate to the *Proceedings* such as short preliminary reports of wide interest, letters to the editor, etc. Of course the adoption of the bi-monthly *Journal* in place of the *Proceedings* in 1969 took care of the need for more frequent publication. Most other objectives of *HortScience* appear about the same now as at its inception in 1966. The notable exception is in the ever-increasing number of research papers of more than 1 page being published in *HortScience* rather than in the *Journal*. We did not consider

Table 5. Written answers to question 20, grouped by 3 major subject categories. Q20. How or in what way or ways can *HortScience* or the *Journal* be more useful to you?

Comments	No. of comments	% of those responding	% of total
A. General comments on publication activities. (430 responses)			
1. Need quicker review and publication of articles.	47	11	2.9
2. Should limit editor to his own views; have a response column for comments to the editor.	13	3	0.8
3. Reduce cost and inefficiency of publications.	64	15	4.0
4. Publish index, stop duplication, use key words.	34	8	2.1
5. Arrange articles by topic and interest group.	22	5	1.3
6. Have a classified section for jobs, etc.	17	4	1.1
7. Misc. - Reduce fees, make publication free to members; service is poor, publications late.	64	15	4.0
8. Require members to publish papers presented at meetings.	4	1	0.3
9. No comment, good as it is, no change needed.	198	46	12.0
B. Comments on content of publications. Research and other articles. (434 responses)			
1. Keep current in research, have high standards and publish only good research.	104	24	6.4
2. Shorten papers, omit photos and large graphs, publish fewer, clear, brief papers.	48	11	2.9
3. Need more extensive articles, oriented to economically important crops.	78	18	4.8
4. Provide more practical articles, related to extension and economics.	61	14	3.7
5. Need more abstracts, reviews and features; publish preliminary data.	100	23	6.1
6. Keep publications separate, with a clear distinction between <i>HortScience</i> and the <i>Journal</i> .	22	5	1.3
7. Publication requirements too tight, allow more leeway for author's style and method.	35	8	2.1
8. Combine the two journals.	52	12	3.2
9. Misc. - Style, format for newsletters, reviews, etc.	48	11	2.9
C. Comments applied specifically to <i>HortScience</i> or the <i>Journal</i> . (213 responses)			
<i>Comments on HortScience</i>			
1. Promote as a quality journal for short articles, symposia, etc.	108	47	6.2
2. Should have no abstracts.	2	1	0.1
3. Should omit altogether	7	3	0.4
4. Need general interest, something for everyone, non-horticulturists.	60	26	3.4
5. Other.	21	9	1.2
<i>Comments on Journal</i>			
1. Long research papers, well refereed, strict requirements.	64	28	3.7
2. Should publish short notes.	30	13	1.7
3. Should remain basic, practical use.	7	3	0.4
4. Other.	28	12	1.6

that such papers could be classified as short notes. As shown in Table 4, nearly as many research papers of more than 1 page are currently published in *HortScience* as in the *Journal*. From the time we adopted the bi-monthly *Journal*, some members have felt that *all primary research* papers should go into the *Journal* so that a single index could be compiled as in the past.

If we accept the 6 major items of Table 3 as desirable for Society publication, there are several alternatives to get the job done:

1. Transfer all primary research articles to the *Journal* (add a section for "Short Communications"), and publish all other items in *HortScience*.
2. Publish all items of *lasting interest* (both research and non-research) in the *Journal* and include news and other items of *temporary* nature as a separate or as a throw-away insert to the *Journal*.
3. Use the *Science* format and publish all items, including letters, editorials, book reviews, symposia,

features, technical papers, etc. in a single bound *Journal*, published monthly.

4. Publish all major research (which carry a technical paper no.) in the *Journal* and permit brief research notes (less than ½ page) which are descriptive only to go to *HortScience* along with other items currently carried.
5. Leave both as they are now, with research articles split between the two publications.

In each of the above listed options, the same objectives could be met. The Society should decide which option is the most effective considering costs, time, and resources required. Less costly alternative methods of printing should also be considered. When *HortScience* was initiated in 1966, there were in existence worldwide about 100,000 technical and scientific journals and the number was growing at nearly 5% per annum, a rate which would double the total number by the year 1981. Many of these journals came into being in the U.S. under grant subsidies in the 1960's. But in the 1970's many such grants dried up and a number of these journals continued to exist by instituting page charges and more recently by increasing library subscription rates. Now, however, (*Science* 186:693, 1974) libraries are approaching the limits of their resources and cannot absorb further rate increases.

The fact that a Society member on the average publishes only about 1.5 papers in *HortScience* and the *Journal* each 4 years and that 57% of the members have published nothing in either in 5 years (Fig. 1), indicates that most of the answers to the questionnaire are from the point of view of *readers* rather than *authors*. The higher cost of publishing in Society publications compared with other journals is probably a primary reason why the average member publishes 69% of his or her refereed research in other journals. We should examine carefully the various alternative methods of publishing with a view to bringing costs into line with other societies.¹

¹The complete questionnaire data are filed on punch cards at Oregon State University should Society members want additional information on any of the questions.