The Naturalist's Directory. Compiled in 1914. Salem, Samuel E. Cassino, 1914.

This used to be a book useful to all naturalists, and there is no good reason why it should not continue to be so if the work were well done and the data edited with reasonable care. The new edition leaves one under the impression that the care taken with it was limited in amount and poor in quality. At page 127 under the general head of the scientific societies of the United States and Canada, and under the subhead "California" are given nine Canadian societies, while one other Canadian society is given on page 129 under the subhead "Canada." Under the "District of Columbia" at page 128 only one society is given; three others are put under "Canada" on page 129. The American Association for the Advancement of Science is listed under Massachusetts at page 130. The names and addresses in some of the foreign countries contain an unusually large number of errors. In one of those countries eight names and addresses contain twenty typographic errors. One only needs to look for the names of a few of the scientific societies he knows of or for a dozen or so of the naturalists he knows to find the weakness of the book. It is a great pity. A book such as this one pretends to be, and carefully edited, would be of great service to naturalists all over the world.

J. C. BRANNER

FRATERNITY GRADES AT PURDUE UNI-VERSITY

I HAVE read with considerable interest the recent article in SCIENCE on "Fraternities and Scholarships at the University of Illinois," by Professor Warnock, since a state of affairs somewhat similar to that he describes exists at Purdue University.

A report made in 1910 by the chairman of the committee on student organizations at Purdue showed a relatively low grade of scholarship in the fraternities. As no decimal grades are used on the registrar's books, the report took into account merely the percentage of A grades in the various groups. This average for the whole student body including the fraternities was 64 per cent.

The average for the honor fraternities, Tau Beta Phi and Alpha Zeta, was 85, and for one departmental fraternity, Triangle, 66 per cent.

All the other fraternities were below normal, ranging from 57 for Acacia to 31 for the solitary sorority. Furthermore, it was shown that although fraternity members constituted but 30 per cent. of the total attendance, 70 per cent. of all students dropped for poor scholarship were fraternity men.

The attention of the fraternities was called to this state of affairs and various efforts were made to stimulate greater interest in scholarship among the members.

The Alford trophy was first competed for in 1912 and won by the Delta Tau Delta. This is a bronze plaque suitably mounted and provided with a silver plate for inscriptions and was offered by Professor T. G. Alford. It is awarded each semester to the Greek-letter fraternity making the best record in scholarship, and must be won four times to give permanent possession. It has so far been held by the Delta Tau Delta, Phi Kappa Sigma, Sigma Phi Epsilon and Kappa Sigma.

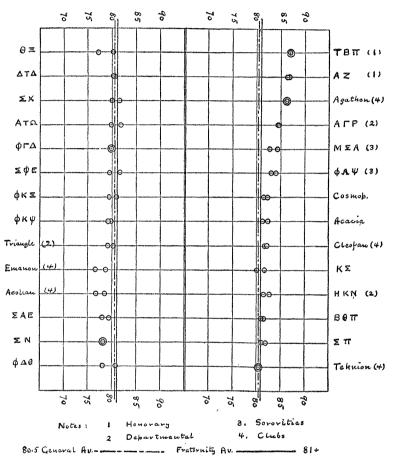
In 1914, Professor James Troop offered a silver cup for special and honorary fraternities not eligible for the Alford trophy. This was won in the spring of 1914 by Alpha Gamma Rho, an agricultural fraternity.

A somewhat uniform plan for recording the monthly standing of their members was adopted by the various clubs and fraternities, and in general much more attention was paid to scholarship than had hitherto been the case.

Besides the standings given out by the registrar's office in connection with the awarding of the trophies, decimal ratings for all fraternity and club members are prepared by the chairman of the committee on student organizations and sent to the respective chapters. Comparisons are made showing whether the members and the chapter as a whole are gaining or losing, and attention is called to the standing relative to other organizations.

As far as can be judged from the returns, the various agencies mentioned have stimulated an interest in scholarship among the officers and members of the various organizations, with the result that the average standing of men inside the fraternities compares very favorably with that of non-fraternity men. The organizations are arranged in the order corresponding to the grades for the second semester. Several comparisons are interesting:

1. The general average of the fraternities is half a point higher than the general student



Attention is here called to the accompanying chart, which shows the scholastic standing of the various clubs and fraternities as compared with the general student average for the first and second semesters of the college year 1913– 14. The decimal grades were calculated from the letter grades for each student. At Purdue University A means 85 to 100 per cent., B 70 to 85 per cent., C below 70 (conditioned) and D failure (subject to be repeated). In calculating the decimal grades, A is taken as 90, B as 75, C as 60 and D as 45 per cent. average. This, however, is due to the inclusion of the honor fraternities. Without these the averages would be practically equal.

• 2. The high standing of the sororities and the remarkable rise of the elder of the two, Phi Lambda Psi, from the bottom of the list in four years' time.

3. The lack of differentiation between departmental fraternities, house clubs and the regular Greek-letter fraternities as regards scholarship.

4. The relatively high rank of the Cosmo-

politan Club or Corda Fratres, considering that it is largely made up of foreigners more or less unfamiliar with our language and our educational methods.

Observation of the grades of various individuals and classes has shown that carelessness in pledging is largely responsible for fluctuations in scholarship. A sudden drop in the standing of an organization is usually due to the entrance of an inferior group of freshmen. Sometimes this one class will handicap the whole organization for several years. Otherwise the weeding out of incompetents and close supervision of the weak will remove the difficulty in a year's time. There is at the present time a general disposition on the part of the fraternities not to initiate pledges 'who are conditioned in any way.

A comparison of the class averages of fraternity men is made in the accompanying table:

College Year 1913-1914

			Sopho-	Fresh-
	Senior	Junior	more	man
First semester	82.5	80.6	80.6	80
Second semester	83	81.1	80.5	79.7

The gradual elimination of the unfit and the survival of the fit is pretty closely shown by these figures.

When we come to study the records of individual organizations for a period of years, we find some interesting facts.

In 1912 the Sigma Pi, a new chapter, was at or near the bottom of the list with a grade of 76.3. Six months of determined work on the part of its officers and members put it tenth in a list of twenty-eight organizations with a grade of 81.9 and second in a list of thirteen Greek letter fraternities.

On the other hand, one of the house clubs through carelessness in its pledges and its house rules has dropped in one year from the fourth to the twenty-fourth place.

One of the fraternities, Sigma Nu, has remained consistently near the bottom of the list, never rising higher than No. 21 and being now No. 27 in a list of twenty-eight. One of the other fraternities, Beta Theta Pi, has remained just as consistently in the upper middle section, its grade never falling below 80.4 and never rising above 81.5.

Of the four Greek letter fraternities winning the Alford trophy in successive semesters, the present rank in a list of thirteen is as follows:

Delta Tau Delta	4
Phi Kappa Sigma	9
Sigma Phi Epsilon	8
Kappa Sigma	1

a list which shows the rather violent fluctuations in rank occurring in a short period of time.

A comparison of the various classes or groups of organizations gives the following average grades for the two college years 1912– 13 and 1913–14:

(2)	Honorary fraternities	86.8
(3)	Departmental	82.7
(13)	Greek letter	80.1
(2)	Sororities	83.5
(4)	Special fraternities	80.5
(4)	House clubs	81.2

The fraternity or social club suffers from certain tendencies which are more or less unavoidable in this kind of community life.

First, there is the disposition to choose pledges hastily and from considerations apart from the real value of the man. On the score of relationship, of social standing or of athletic prowess many candidates are chosen in haste and repented of at leisure.

Second, there is the tendency to relax the house rules and to permit more loafing, singing, smoking and card playing than is for the best interests of the organization. The more or less luxurious living and the feeling of boon companionship are too alluring for weak-kneed students who have not been used to such opportunities. This is a matter which any chapter can easily control if it wishes.

Third, there is the fact that fraternity men as a rule engage in student activities to a greater extent than do the non-fraternity men.

In 1911 the writer addressed letters to the deans of several neighboring universities, ask-

ing information as to the relative standing of fraternity men, reasons for any deficiencies which might exist and possible advantages to offset such deficiencies. Replies were received from the universities of Illinois, Iowa, Michigan, Wisconsin and Minnesota. Although there was naturally considerable variety of opinion, on the whole the replies were favorable to the fraternities, assuming that the latter were normal and were properly governed.

The grade of scholarship was generally admitted to be somewhat lower, but on the other hand it was conceded by most of the writers that fraternity men took a more active part in student affairs.

The accompanying table shows the conditions existing at Purdue and at Wisconsin in 1911 and it is possible that the relative values would be much the same to-day.

	Purdue			Wisconsin		
Activities	Total	Frat.	% Frat.	Total	Frat.	% Frat.
Athletics—varsity Publications (edi-	38	15	39.5	83	39	47
tors)	24	7	29.2	95	56	59
Music and drama	18	9	50.	89	62	69.7
Class officers		7	46.6	48	24	50
Honorary societies	46	8	17.4	42	7	16.7
Totals Per cent of students		46	32.6 av.	357	188	52.7 av.
in university			23.9			27.3

Fraternity Men in Student Activities, 1911-1912

It will be noted that in all branches of activity but one the percentages of fraternity membership are higher than the percentage of total membership in the university.

In honorary societies, the fraternity membership is less.

On the whole, the fraternity man is one who is content with average rank and is ambitious for athletic, social or political rather than scholastic honors. He is a good fellow, and probably when he graduates knows more of college life and customs than his barbarian brother.

Men in fraternities and out are much the same intrinsically, and what difference there may be is due rather to environment than to character or ability. C. H. BENJAMIN PURDUE UNIVERSITY

HOW CAN WE ADVANCE THE SCIENTIFIC CHARACTER OF THE WORK DONE IN THE AMERICAN AGRICULTURAL EXPERIMENT STATIONS?

WITH the provision of the new Smith-Lever Fund for extension and demonstration in agriculture, with the increase in the already great number of farm advisers, with a thousand agencies for spreading information among the farmers, the experiment stations ought to be able at last to find and to occupy their proper field.

That field is research, the scientific investigation of questions connected directly or indirectly with agriculture. The demand for men capable of such work has always been greater than the supply of trained and able men. How shall we call men, and women, to this high service in increased numbers? And how retain them? These are the vital problems which confront the experiment stations; there are ways in which the great universities may aid the smaller ones in solving these problems.

Without going into the history of the experiment stations it is sufficient to point out that in the beginning their purpose was not clear even in the minds of most of the early workers: they were popular information bureaus in part, until they ran short of information. There has been a great deal of repetition and of compilation in their work: and, in looking over the earlier bulletins, we find little streaks of high-grade ore, pure investigation, the work of men in advance of their time, for the most part not appreciated, and misunderstood.

The mills of the gods grind slowly; now, out of those bulletins published in those earlier years, only the ones which were original in thought and method have survived; the rest served their temporary purpose and were forgotten.

To-day we are beginning to appreciate the value of investigation. In every state university, in every meeting of the Association of