

# Hidden Resource: Amateur Scientist

**EDITOR'S NOTE:** This is part of a speech given by W. Stephen Thomas, Director of the Rochester Museum of Arts and Sciences, Friday at Cranbrook's Members' Night. Thomas made a study in Philadelphia of the role of the amateur scientist.

By W. STEPHEN THOMAS  
Special Writer

With a public alerted to the power of science in our lives today and with a healthy desire to speed up our education to produce more scientists, we are neglecting to use the abilities of many persons who pursue some branch of science as an avocational interest.

These are the amateur scientists, the laymen astronomers, telescope-makers and users, the bird watchers, the botanists, the mineral collectors, the self-appointed weather men who man their own weather stations, and even the zealous and experimental horticulturists and photographers. These folk are not mere pastime seekers or bunglers, but highly competent in knowledge and skills.

**WHO IS THE true amateur scientist?** First, he or she is a person who follows a hobby for the pleasure it gives, and not through any desire to get credit or gain a reward. Second, his interest involves self learning and self-improvement to such a degree that he is stimulated to acquire facts by learning a technique or process.

In this way, a vast number of hobbyists have perfected some special skill in their spare moments, whether it be the use of the microscope, the making of a photograph, a print, or the handling of a bird to chart its migration route. Third, and finally, there is the desire of many amateurs to do original work or investigation which will lead to the advancement of science.

These followers of science, although they are laymen and non-professionals, often without realizing it, are observing basic rules which typify the spirit and service of science.

THESE RULES are (1) to ob-

## Dems Got Hart At Valentine's Day Meeting

Oakland county Democrats will gather Feb. 12 to hear their two favorite sons speak before a buffet dinner.

The occasion is the annual "Valentine's Day Message to his Constituents" in honor of U.S. Senator Phil Hart.

**HART WILL** relate his experiences in the past year, reveal upcoming plans for the new senate session and promises to touch lightly on behind-the-scenes anecdotes covering the national convention picture from the Washington viewpoint.

The affair is also a yearly fund raising party, with tickets at \$2.25 per person.

However, Democrats will hear about another treasury hunt when Billie S. Farnum, former assistant Secretary of State and newly appointed Democrat State Central Committee chairman will discuss the party's brand new statewide membership drive.

**THE DRIVE** will get underway officially with applications in the political party selling on a basis of five different plans.

The dinner, scheduled for 6:30 p.m. will be held in the Cal Bldg., Williams Lake road, Waterford township. Tickets may be purchased from Mrs. John McVay, 1678 Yosemite, Birmingham.

## Troy News Briefs

### Refuse License For Dance Ranch

**TROY**—Troy city commission refused to extend the operator's license of the Curmi Dance Ranch at 3261 Rochester, Troy.

Roland A. Curmi, owner of the ranch, was turned down by all commissioners except Stanley Smith. His license runs out Feb. 1.

### Troy to Speed City Sewer Plans To Help Schools

**TROY**—Troy commissioners agreed last week to inform the state health department of its sewage disposal plans so that the school board could go ahead with its building program.

If the plans satisfy state officials, it means the school district might build two additions and a new school without fear that the health department would close the doors.

The health department told the school board Jan. 17 that it would not approve construction plans unless adequate sewage disposal facilities are available.

### Troy Proposes Tax Refund

**TROY**—When Troy voters go to the polls April 4 to vote on opinion on the \$125,000 DFW proposition, they may see a heartening clause. Commissioners have instructed City Manager Stanley E. Burke to amend section 10.6 so that any surplus will be immediately refunded to the owner.

serve carefully; (2) to weigh evidence impartially; and (3) to reason critically. In many cases, these individuals are self-trained and they have learned the method of science by close observation of natural phenomena or by working with their hands in some form of manual skill, or often by a combination of both.

Entirely apart from the importance of amateur science for its effect on the person for uplifting his mind, increasing his skills, and occupying his leisure, is its benefit to advancing science and helping other persons.

At the present moment, thousands of amateurs are gathering data which, when properly compiled and analyzed, will add to knowledge. These people keep and report accurate records of meteors and variable stars, take area censuses of birds, animals and plants as part of ecological studies, excavate and map prehistoric sites, and record tree rings to chart weather cycles of the distant past.

**BUT MANY MORE** can be encouraged and stimulated to obtain worthwhile results if professional scientists would do their part. In fact, the efficacy of small, well-organized fact-finding projects of amateurs, working under the direction of professional guidance was proven some years ago by an experiment carried on in the Philadelphia area by the American Philosophical society on a grant from the Carnegie corporation.

But amateur scientists can be used in other ways. In 1959 the public schools of Lexington, Mass., drawing on a community population of 23,500 through the distribution of questionnaires to that city's 6,800 home addresses, gathered information on 500 specialists in the fields of science, business, economics, and technology.

Many of these proved to be amateur scientists. Now, a directory with subject index has been compiled and these experts are being called on to serve as volunteer guest speakers and lecturers for seniors.

**ANOTHER WAY** of utilizing the hundreds of amateur experts in any one of today's urban or suburban communities is to seek them out for answers to many complex questions arising in science and scholarship solicited by the general public for a variety of reasons. These are questions which are now being directed to museums, libraries, universities and colleges and which cannot be answered.

In times of war and national emergency amateur scientists can also be depended upon to supply needed skills and knowledge of great value. In World War II it was found that amateur scientists could be used by a number of federal scientific bureaus as well as by the National Inventor's council and the National Defense Research committee.

Amateurs were also used in defense industries and, furthermore, they had special qualifications for civilian protection measures.

**EVEN MORE IMPORTANT**, but largely unrecognized by the public was the use of amateur scientists who became soldiers, sailors and marines. In their spare time, situated in far-flung corners of the globe, many thousands of these people made important scientific collections and recorded data which were used and published by professional scientists in a number of our leading museums and related scientific institutions.

Finally, it should be pointed out that because of his value to science and society, the true amateur scientist should be more widely acclaimed for his contribution.

Dr. Frank W. Sinnott, in his presidential address before the American association for the advancement of Science in December, 1949, said, "If science is to develop vigorously and to serve the world as it ought to, it should not be wrapped up in mystery but must be understood, at least as to its spirit and methods, by those ordinary citizens upon whom it has to depend for support. The best possible means for bringing this about is a widespread participation of laymen in scientific work."

**ONE PRACTICAL WAY** of encouraging the amateur is by the award of fellowships and certificates of merit by museums and other scientific and educational organizations of high standing. It would not be out of place for city and community councils to do the same, perhaps, on the recommendations of local scientific bodies.

A pioneer venture in this direction was the action of the Rochester Museum of Arts and Sciences twenty-two years ago in awarding fellowships to distinguished amateur scientists and laymen specialists. This practice has been continued annually to the present date. Advancement of the layman scientist to a position in community esteem is only just when it has been proven by surveys that amateur scientists often combine the spirit of curious inquiry with the desire to do good and to help others. It has been remarked before that intellectual curiosity combined with ethical soundness may be one of the really important aims of education, if not of life itself. The amateur scientist is then, indeed, the very epitome of the happy discoverer and community benefactor.

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It is more than a collection of fixtures  
and stock  
and salesladies  
and fitters . . .

It's a magnificent store  
of smart fashions  
for discriminating women.

Superlatives from Oleg Cassini, Junior  
Sophisticate, Mr. Mort, Mademoiselle,  
Junior Accent, Bernard Altman,  
Susan Thomas, Suburbia U.S.A.,  
Rose Marie Reid and many others.



TELEGRAPH at MAPLE ROADS  
BLOOMFIELD SHOPPING PLAZA

THE RED CARPET IS OUT . . .  
**GRAND  
OPENING**  
THURSDAY, FEBRUARY 4th

Fashion vantage from any point of view. Pure thoroughbreds for the beach, daytime and evening wear. Only a sampling of our fabulous collection.

A. Neckline V'd as planned by Oleg Cassini. Slim dot in pure silk of sizzling taupe and black. \$95

B. Capturing the casual mood. Electric blue blouse and skirt in pure silk accented by silk trimmed sleeveless white leather vest. \$55

C. It's by Rose Marie Reid. Muted shadow rose that sparkles. Tight fitted bodice. \$35

Matching peek-a-boo jacket. \$75



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THIS WEEK ONLY . . . We will remain open Thursday, Friday and Saturday Evenings until 9 P.M.