### Rochester Academy of Science P.O. Box 92642 Rochester, NY 14692-0642

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ABOUT THE **ACADEMY** - The Rochester Academy Of Science, Inc. is an organization which has been promoting interest in the natural sciences since 1881, with special focus on the western New York state region. Membership is open to anyone with an interest in science. Dues are minimal for the Academy, and are listed in the membership application. Each Section also sets dues to cover Section-related publications and mailings.



For applications and/or more information contact membership chairman Stephen Busschaert, 54 Keswick Rd., Rochester, NY 14609; by telephone 288-5683; or by e-mail

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The Academy Internet web page is http://www.rasny.org

The *Astronomy Section* Information phone number is (585) 987-5330. The *Astronomy Section* Internet web page is <a href="http://rochesterastronomy.org">http://rochesterastronomy.org</a>

This "BULLETIN" is produced monthly, except July and September, by the Astronomy Section, Rochester Academy of Science. The editor is Frank Bov, 16 Gladbrook Rd., Pittsford, NY 14534 Phone (585) 422-9910 (days) and (585) 385-1518 (evenings), e-mail <frankbov@rochester.rr.com>

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### **Rochester Academy of Science**

# BULLETIN



"An organization of people in the Natural Sciences"

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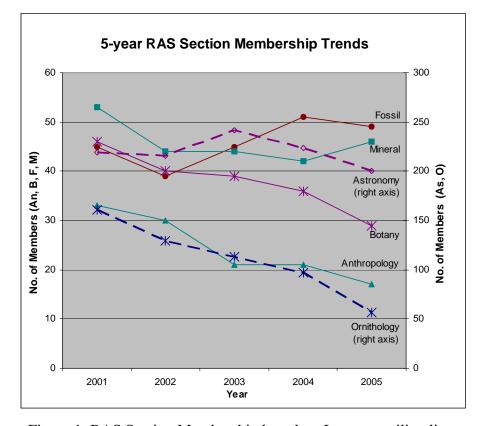


Figure 1: RAS Section Membership based on January mailing lists.

# THE ACADEMY IN TRANSITION

# Part 1: Recent Trends in RAS Section Membership

As a relatively new member of the Academy, I see changes in the RAS that are, perhaps, more noticeable to me than to others of longer tenure. I present here the first of several articles highlighting trends in our organizational health. I don't claim to have answers, but rather hope that widespread awareness of some of the underlying issues will promote beneficial activities on many fronts.

(Let me note from the outset that this analysis is independent of the size of the Section. In my experience, a small group that has stable or growing membership, an active program and rotating leadership responsibilities is just as healthy as a large one.)

I joined the Astronomy Section in 1998 and have been helping distribute the BULLETIN since late 2001. This includes creating mailing labels each month, based on a current-members file from RAS Secretary Bill Hallahan, files which I naturally retained. The data presented in this series comes from an analysis of these files, with the assumption that January mailing lists contain all the prior year's members.

#### Data Analysis

We are an organization with a problem, and it's clearly evident in Figure 1. Half the Academy's Sections are healthy, and in some cases, doing quite well, while the other half are in decline.

Over the last five years, only the Fossil Section has grown membership. While Astronomy and Mineral Sections show very slight declines, these losses are well within year-over-year variability. Thus these three sections constitute the "healthy half" of the academy.

The other half of the Academy is shrinking; Anthropology, Botany-Entomology and Ornithology Sections are losing 10% to 20% of their membership *each year*.

Bad as that may sound, the actual situation is far worse.

Section membership levels are effectively subsidized by the Academy's dues structure. RAS dues only apply once, so it's quite economical to join multiple

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sections once you're a member. One measure of a Section's intrinsic health, it's viability as an independent organization, is the number of people willing to pay RAS dues just to join that one Section.

Section	% Single Section Members		
Anthropology	29%		
Astronomy	82%		
Botany	41%		
Fossil	39%		
Mineral	43%		
Ornithology	54%		

Table 1: Percentage of 2005 members who joined one section.

By this metric, Table 1 shows that Astronomy is the only healthy section. Year after year, over 80% of Astronomy members demonstrate that astronomy is what they came for.

As noted earlier, Astronomy is only part of the "healthy half" of the RAS. The apparent health of Fossil and Mineral Sections can be explained in these terms by viewing them as a joint section; each has roughly 40% of its membership belonging to the other!

#### Discussion

The Rochester Academy of Science is celebrating its 125<sup>th</sup> anniversary in 2006. The scientific community is very different today than in 1881 and

the RAS must change if it is to continue to serve the Rochester scientific community. While the RAS today remains a viable organization, it faces a significant challenge if the long term health of individual sections continues to decline.

Anthropology Section has quietly laid out a pattern of decay, and that pattern will be the subject of next month's article.

I'm told the Ornithology Section lost a substantial number of members when the Rochester Birding Association was formed. Whatever the cause, the results have been disastrous for the RAS. Earlier this year, Ornithology's status became inactive at the Section's request and no birding activities or events have been submitted to the BULLETIN since September 2005. (Ed.: Birding event submissions

(Ed.: Birding event submission remain most welcomed.)

Recent articles announced the Botany-Entomology Section's efforts to address their issues. A core group is actively seeking ways to better serve current members, potentially expanding the scope of scientific inquiry to attract new members. In my opinion, this is a most hopeful beginning, and I urge those with an interest in this area to participate.

When I was President of the Astronomy Section, I tried to interest my fellow amateur astronomers in the other scientific disciplines represented by the Academy, to no avail. My constituency's interests were firmly planted in the stars and

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there was no way I could interest them in earthly sciences. As a direct result of the present analysis, I now believe this approach was fundamentally flawed.

#### Conclusions

1) Sections with healthy membership have a core of members with an abiding interest in the topic at hand.

In 2001, 67% of Anthropology Section members belonged only to Anthropology, and 71% of Ornithology Section members belonged only to Ornithology. In 2005, it's 82% joining only Astronomy, and if one combines Fossil and Mineral Sections, 62% belonging only to the merged section.

2) Sections can be sustained for a period of time by the dedicated effort of a small group of individuals.

My understanding is that the RBA/Ornithology split occurred in the mid-1990's, yet it was many years before an outsider such as myself saw an effect. In the end, the Ornithology Section became inactive when the small group of dedicated individuals finally became too small.

Today, the Anthropology and Botany-Entomology Sections are not far behind Ornithology. A small but dedicated group is trying to grow Botany-Entomology and if they are successful, we will have a viable approach for rescuing an ailing Section.

#### Closing

On one hand, this article could be

viewed as a pile of tripe from an editor desperate for some content. The last part has some truth to it, but there is a factual basis for this analysis. I've looked at these membership patterns for years, but never saw the story they told until now.

In best scientific tradition, I look forward to your comments and criticisms as much as I do writing Part II: Trends in Multi-section Membership

Frank Bov Past-president, Astronomy

## RMSC DISTINGUISHED SCHOLAR LECTURE

# Hot On The Trail Of The Ivory-Billed Woodpecker

Tim Gallagher, Cornell Lab of Ornithology

Wednesday, February 15 7:30 PM Eisenhart Auditorium

Tim Gallagher was one of the first three searchers to see and identify an ivory-billed woodpecker in the bottomland forests of Arkansas in 2005. Thought by most to be extinct, the ivory-bill had remained the object of a passionate quest by Gallagher. Share the joy of this momentous discovery with one who experienced it first-hand. Tim Gallagher is editor of the Cornell Lab of Ornithology's Living Bird magazine, an award-winning wildlife photographer, and author of the new book, The Grail Bird.

Call (585) 697-1942 for Tickets: RMSC Members \$14 adult; \$7 student; Public \$15 adult; \$8 student

# EVENTS for FEBRUARY 2006

(For updates to Academy events, check the Academy web site, http://www.rasny.org, or appropriate Section web site.)

### Fri 03 ASTRONOMY GENERAL MEETING

7:30 PM at RIT, Gosnell Science Bldg; 1st floor room A-300. Our featured speaker will be Dr. Judy Pipher, Professor Emeritus at the U of R, speaking on the Spitzer Space Telescope, a project in which she played a key role. Short talks by other members will add to the evening. Visitors are always welcome. For information, call Carol Latta at 230-9548

### **Tue 07 FOSSIL MEETING**

7:30 p.m. in the Community
Meeting Room, Brighton Town
Hall, 2300 Elmwood Avenue,
Rochester, NY. John Handley will
speak on "Nova Scotia: A Tour of
the Carboniferous." Visitors
welcome. Contact Linda Heffron
461-4179 for more information or
check the RAS Web site for the
latest updates.

### Wed 15 RMSC DISTINGUISHED SCHOLARS LECTURE

7:30 PM at Eisenhart Auditorium. Tim Gallagher from the Cornell Lab of Ornithology will deliver a lecture titled: *Hot on the Trail of the Ivory-Billed Woodpecker*. See the article on page 1 for more information. Call (585) 697-1942 for Tickets: RMSC Members \$14 adult; \$7 student and General Public \$15 adult; \$8 student

### Tue 21 MINERAL MEETING

7:30 PM Brighton Town Hall 2300 Elmwood Ave., Brighton NY in the Auditorium. Program will be a review of the Tucson Gem & Mineral Show. Refreshments. For information call Chuck Hiler 924-7496 or check the Academy web page for possible updates.

### Sat 25 BOTANY FIELD TRIP

10 a.m. Winter Hike in Durand Eastman Park. Meet at the old zoo parking lot. Karen Wolf, 670-9709

### Tue 28 BOTANY-ENTOMOLOGY MEETING

2:00 PM and 7:30 PM (Yes, 2 meetings on the same day.) We will discuss the future and reorganization of the Section. Liz Pixley's home 131 Parkmeadow Drive, Pittsford, 334-0977.

### EVENTS IN EARLY MARCH

### Fri Mar 03 ASTRONOMY GENERAL MEETING

7:30 PM at RIT, Gosnell Science Bldg; 1st floor room A-300. Speakers: TBA. Short talks by other members will add to the evening. Visitors are always welcome. For information, call Carol Latta at 230-9548

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