

THE NICHE

Department of Biology Student-Faculty-Alumni Newsletter

Volume 6, Number 3

College of William and Mary

April 1994



Department to Add Botanist and Vertebrate Physiologist

The Biology Department is finishing two faculty searches which should culminate in hiring two new Assistant Professors ready to begin this Fall.

According to the announcement placed in *Science* magazine, "The botanist we seek must be highly qualified to teach General Botany. Special emphasis will be placed on the ability of the successful candidate to communicate effectively to very large classes of beginning-level students. We particularly encourage applications from individuals doing research in vascular plant evolution and systematics who could also offer upper level courses in that area."

The vertebrate physiology position is described as being for "a vertebrate physiologist who is sufficiently broad in training to teach animal physiology and an appropriate upper level course in his/her speciality. Applications from physiologists also capable of teaching General Zoology are especially encouraged."

Four Biology faculty members are completing their first tenure-track year with us (**Professors Broadwater, Pryer, Reilly, and Saha**), while **Professor Laurie Sanderson** completes her second. Cell biologist Pryer has decided to leave William and Mary and return to California, and a search for her replacement will begin next year.



The department faces interesting challenges as well as large increases in student demand at the same time it goes through significant changes in its faculty. Five years ago, Biology was 100% tenured. Next year, only 12 of 20 faculty will be tenured.

Dr. Coursen is Retiring

By Callan Bentley

Dr. Bradner Coursen is retiring from the department after this semester after 26 years of teaching biology at the College. Coursen estimates that he has taught in excess of 10,000 students during his time here, infecting a great many of them with an intense fascination for the processes of biology.

"I was never a strong student in high school," Coursen said. "I was more interested in girls and athletics than in academics."

However, his tenth-grade biology teacher stimulated his interest in the life sciences. After a two-year stint in the Navy, Coursen went to Drew University in Madison, N.J. on the G.I. Bill. Originally intending on majoring in architecture, Coursen soon switched to biology. He planned to concentrate in zoology, but then plants caught his fancy, and he graduated with a botany degree in 1952.

After working in the research department of the now-defunct American Can Company for three years, Coursen headed back to the classroom, a place he would become intimately familiar with. This time, the setting was the University of Maryland, where Coursen received a masters degree in nematology in 1957 and a Ph.d. in fungus physiology in 1959.

Coursen then went to work for Lawrence University in Wisconsin. "That's where I learned to teach, if I ever really did," he said.

He worked at Lawrence until 1968, when he travelled east and stopped in Williamsburg. It was in August of that year that Coursen began his tenure as a professor in the College's Biology Department. Since that *(continued next page, Coursen Retires)*

"I've taught somewhere in excess of 10,000 students...probably the most anyone has ever taught here...."

Congratulations New PBK Members

Once again Biology students were disproportionately represented in selection to Phi Beta Kappa. Making up about 10% of the senior class, 23% of the Spring seniors selected for PBK are biologists! Congratulations to our nine new members:

Robert Matthew Campolattaro, Lori Anne Chaffin, Leslie Sue Crabtree, Kristin Luetze Gould, Sameena Shireen Hassan, Lance Hamilton Hoffman, Shannon Nicole Miller, Seth Belote Roberts, Leanne Marie Yanni

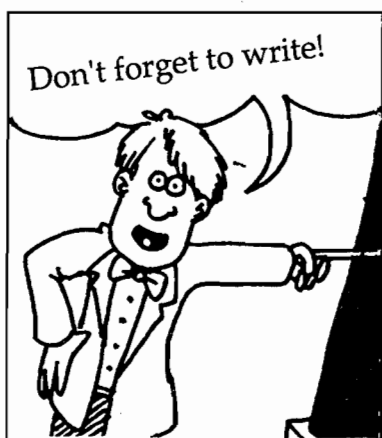
Coursen Retires *(continued from page one)*

time, Coursen has taught classes in mycology, organic evolution, mechanisms of microbial activity, and, due to his broad background of studies, many introductory classes. A great, great many. "I've taught somewhere in excess of 10,000 students... probably the most anyone has ever taught here," he said.

Coursen's research has focused on using fungi to study cellular aging, in particular what effect aging had on the activity of enzymes. "It's very interesting, and a lot of fun to do," Coursen said. He is mentor to two or three honors students every year, and has sponsored six graduate students during his time in the department.

The department has changed quite a bit since his arrival in the late 60's, Coursen noted. "When I came here in 1968, the department had eleven or twelve faculty members...and, of course, the number of students has increased dramatically, too."

In recent years, Coursen sees three major changes: the increase in the number of women in the department, the increase in the number of faculty members interested in molecular research, and especially in the last five years, a large increase in cutting of class. "Now, on a fairly regular basis, it's 40% cutting," Coursen said. Also noticeably different from twenty years ago is the

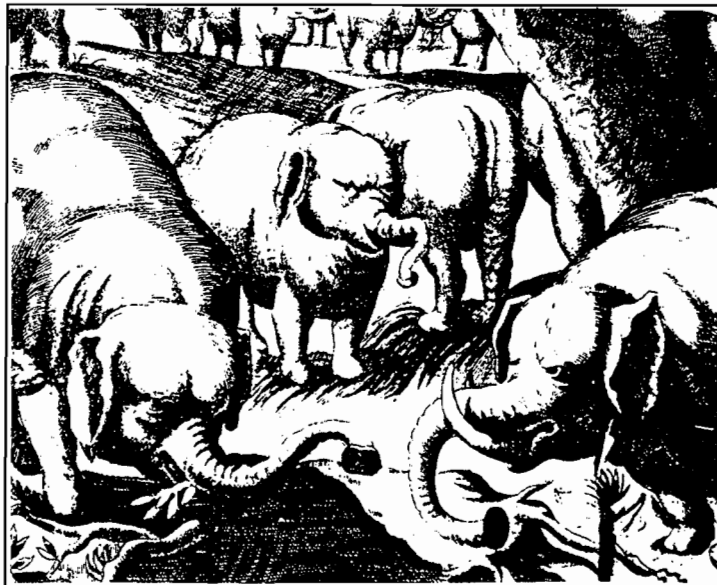


College's attitude toward the faculty. "There's been a substantial shift in demands put on the faculty, especially a need to publish and to get grants," Coursen said. "This results in a withdrawal of time from undergraduate work." Coursen sees this as a push for homogenization of the faculty, something not very desirable in a world where different individuals have different talents.

Despite all the positive and the negative changes, "there are still high numbers of really good students at William and Mary," Coursen said. The students are Coursen's reason for staying in the business of academia for so long. "To me, that's what it's all about," he said. "My greatest ties to the department are the students."

Coursen likes to remain in close contact with the students he teaches. "Teaching isn't just standing up in front of a bunch of people and talking," he said. "You've got to try to make yourself approachable to students, and this is particularly true of big classes. Each person out there is an individual and you can only teach them well if they feel like they can come and talk to you." Coursen delights when students drop by his office to chat. "That's what has made this job a joy," he said.

Now that retirement is eminent, Coursen plans to do "as little as possible.... I'm going to enjoy my wife and family in ways I haven't been able to." Future plans include teaching elderhostel classes, taking up woodcarving and woodworking, and travelling around the country in his conversion van, visiting his ex-students. Despite the fact that he is leaving, Coursen sincerely wishes to remain in close contact with as many of his ex-students as possible. Professor Coursen welcomes any contact at his home address, 102 Black Oak Drive, Williamsburg, 23185.



The infamous Bio 101 in 1980!

The description below is taken from the 1980 yearbook

Killer Courses

Just the mention of some infamous hard courses is enough to send overworked students into a frenzy

One of the simplest facts of life at the College was that there were hard courses. A lot of them. Most people came to W&M to be challenged, and few were disappointed.... Each department boasted its own particular killer course, but a select few were infamous campus-wide. The mention of P-Chem was enough to send otherwise stalwart chemistry majors into hysterics, while Shakespeare caused English majors to blanch....

But the uncrowned king of the "Courses You Love to Hate" contest was Bio 101-102. The scourge of many ex-pre-med students, ex-biology majors and ex-W&M students in general, an awesome mystique has continued to shroud the course.... Mid-term and finals periods were a communal exercise in hypertension, since due to the large number of students in Bio 101-102 few underclassmen were unaware of the impending doom, even if they weren't taking the course. The midnight oil not simply burned, but practically incinerated many of the freshman study lounges where crammers gathered to spend the night together in fear and loathing. When the final exam concluded the survivors gently collapsed, soon to revive and swell the ranks of those who kept the fearful rumors alive and well for the next year's freshman class.

(1980 Colonial Echo, page 66)

In honor of Professor Coursen's many years of service to the Department, we are collecting letters from former students to be placed in a bound volume and presented to him. If you are interested in writing a letter of thanks and appreciation, please send it to Martin Mathes, Department of Biology, W&M, 23187.

Howard Hughes Medical Institute \$1 Million Grant

Department's Five-Year Grant Nears Completion

Institute Invites Second Proposal

By Meghan Davis

Five years ago William and Mary received an invitation from the Howard Hughes Medical Institute that was hard to refuse. The non-profit organization, founded in 1953 to promote biomedical education and research, asked the College and 100 other research universities to compete for \$61 million in grant support for undergraduate education and research in the biological sciences. The select group of universities was chosen because each had a strong record of placing graduates in medical school and graduate schools in biology and supporting sciences. Only half the universities would win.

The Dean's Office organized the College's response to the invitation and former Biology Chair **Lawrence Wiseman** was selected as principal writer for the proposal. Fortunately, William and Mary was chosen as one of the 51 winners, along with such institutions as Brown, Cornell, Johns Hopkins, Princeton, Stanford, and UVA. The College was awarded \$1 million over five years to address three major areas: (1) outreach to local schools in biology education; (2) programs for high school minority students in the sciences; and (3) development of offerings for William and Mary undergraduates in biochemistry and molecular biology.

Now in its final year, the programs supported by the grant have been highly successful. The outreach component has included cooperation with the School of Education in providing a strong science component in a special program for gifted elementary school students. Also, local high school teachers have taken semester-long 1-credit "update" courses in Genetics, Cell Biology, Molecular Biology, and this semester in Developmental Biology. Four high school teachers each summer have done research with William and Mary Biology, Chemistry, and Marine Science faculty members.

The second component of the large grant, high school minority student studies in the sciences, has been a cooperative venture with the Office of Multicultural Affairs. This on-campus summer program introduces prospective college students to laboratory studies in biology as well as calculus and other sciences.

The remainder of the grant is used in a variety of ways to increase the opportunities for William and Mary students in biochemistry and molecular biology. Two new faculty positions were created and funded by the Hughes Institute, Molecular Biology in the Biology Department and Biochemistry in the

Howard Hughes Medical Institute

1994 Undergraduate Biological Sciences Education Program

Name of Institution The College of William and Mary

Total Grant Request \$ 1,921,080

Chemistry Department. Currently **Dorothy Reilly** in Biology and **Deborah Bebout** in Chemistry are William and Mary's Howard Hughes-funded faculty members. Also, summer Howard Hughes Fellowships are offered to about 10 undergraduates in Biology and Chemistry to undertake research projects with individual faculty.

Our original five-year grant is due to expire this year, but the Howard Hughes Medical Institute has once again included us among a new group of research universities invited to submit proposals for another award. And once again, **Professor Wiseman** assumed the role of chief proposal writer (with significant help from current **Biology Chair Eric Bradley** and **Biology Professors Broadwater, Pryer, Reilly, and Saha**; **Chemistry Chair Steve Knudson** and **Chemistry Professor**

Deborah Bebout; **Professor of Marine Science John Graves**; and **Geology Professor and current Dean of Undergraduate Studies Heather Macdonald**). Winning this time will be more difficult than five years ago. Not only have they increased the number of institutions invited to submit proposals, but they have cut the amount of grant money offered from \$61 to \$54 million. Wiseman notes, "This means either they'll offer smaller grants to more places, or that the grants will be harder to get."

The new proposal asks for continued support in the same three areas funded by the present award, but asks for significant more support for buying new equipment and supporting undergraduate research in biochemistry, cellular and developmental biology, and molecular biology. "Of course we hope to be successful again, but the competition is terrific --essentially the Ivy League and every other top research

university in the United States," says Wiseman, adding, "I believe we have a very strong proposal, but I'm sure the other institutions have offered similarly strong presentations. A little luck may be required this time."

If the College's proposal is not successful, many of the ongoing successful endeavors supported by the current award will be severely limited or eliminated. However, the two faculty positions established by the original grant are in no danger of being cut. Funding for both of them will be assumed by the university beginning July 1. Professors Bebout and Reilly are safe.

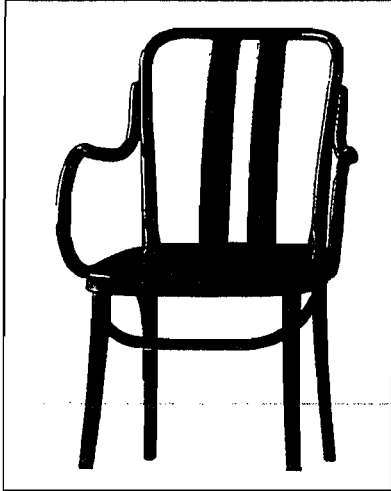
The Howard Hughes Medical Institute will announce award winners some time this summer. "We did all we can do, and now we can do nothing but wait," said Wiseman. The September **NICHE** will tell us if he is happy or not after the wait.



Dr. Bradley's First Year as Department Chair

By Callan Bentley

The advent of spring in Williamsburg brings out new buds, flowers, and migratory birds. It is a season of life, a prime time for biologists. For Dr. Eric Bradley, it is also a time of reflection, as he nears the end of his first year as chair of the department.



"It's an exciting time for the department," Bradley said, "because of all the new faculty. We have lots of new people...creating lots of new opportunities."

The department has hired seven new faculty in the past three years, and Bradley considers their arrival a boon to the department.

In fact, he feels that the hiring and integration of new faculty is one of the department's biggest ac-

complishments over the past year. "I'm excited to be able to coordinate the team effort to bring in new faculty," he said. "I'm trying to facilitate the development of the department along the lines that the majority wants."

The new faculty are particularly needed, Bradley stressed, because of the increasing student enrollment that the department faces. "I'm interested in lessening the impact of increasing enrollment on education," he said, "or at least in keeping pace with it."

Bradley's position as chair has led to his pulling long hours and working every day of the week on some aspect of his job. In addition to steering departmental matters through the College, he teaches his endocrinology course and works on his own research. Bradley also serves on the faculty assembly, of which he is a charter member.

The increased portion of his time devoted to departmental matters has caused his research to suffer, he said. "There's not enough time to read up on new work and try out my ideas," Bradley said.

One of the most demanding aspects of chairing the department is responding to crises, Bradley said. Dr. Wiseman, department chair until last year, described the position as a "fireman's job," and gave Bradley a plastic fireman's hat when Bradley took over last summer.

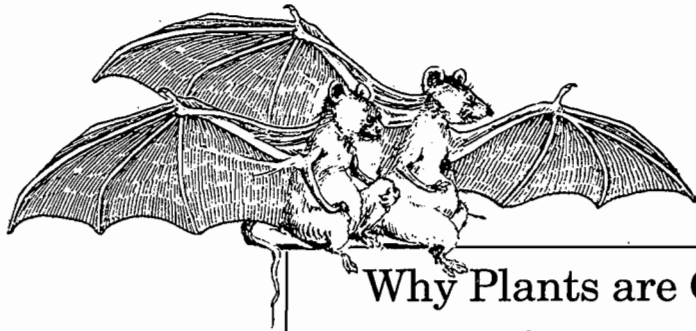
"Crises come up unanticipated," Bradley said. "I don't have the experience yet to tell me that [crises] are coming." Bradley suspects that he will get a better feel for crisis management as he continues into his second year as Department Chair.



Biology Concentration Writing Registration Procedures Change

All William and Mary undergraduates are obligated to meet a so-called Concentration Writing Requirement (CWR). Different departments or programs satisfy the requirement various ways. In Biology, students may fulfill the requirement in one of several ways, including taking particular laboratories, or completing a research paper in BIO 403, or by completing an Honors thesis. Most students do it in the context of a laboratory course. Because some labs have large enrollments, or multiple sections, individual instructors must limit the number of students permitted to complete the CWR under their direction. This means that in many of our laboratories some students are doing just the *regular* work required of all participants in the course, while other students are doing additional work necessary to complete the CWR. To keep straight who was doing what, special "dummy" sections of real courses were designated with **W**, and students seeking to meet the CWR were required to register for both the *real* section which carried credit, and the *dummy* course, BIO 300, *Writing in the Biological Sciences*. Students seeking to fulfill the CWR during a particular semester will be required to register for BIO 300. **The actual practice of fulfilling the CWR in lab will change very little.** Instructors will still limit the number of students they can handle in large courses, but before the end of the Add-Drop period early in the semester, we will know how many students wish to do the CWR, and how many have actually found a way to do it. Those who have not "found a home" can either withdraw from BIO 300, or can sign up for a writing instructor in a non-lab context. The instructor will make individual writing assignments until he or she has gathered sufficient information to certify that the student has met the CWR. The single number, BIO 300, will provide a record-keeping mechanism, and a way to report that information to the Registrar. **As a dummy course, BIO 300 is not graded, receives no credit, and does not appear on the final transcript.**

.....Professor Grant, Chair, Department of Biology Curriculum Committee



Why Plants are Cooler than Animals

By Natalie Weber

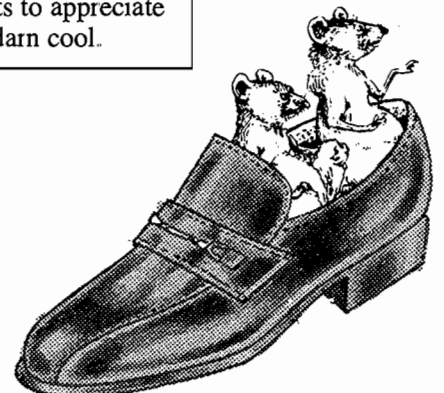
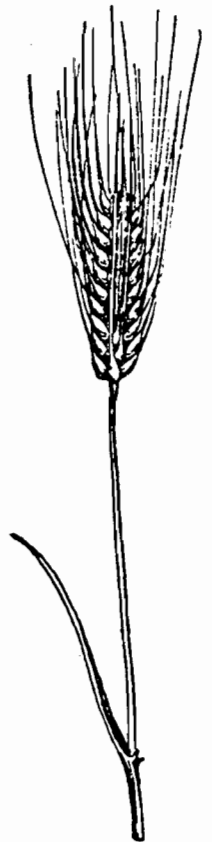
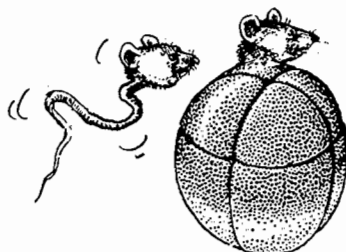
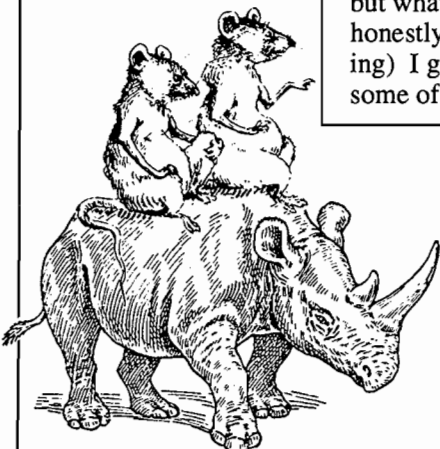
All through my four years here at William and Mary, I've heard plants get a bum rap. "Plants are sooo booring," many of my friends and fellow students would say. Many of them would not elaborate further, but I get the usual, "Well, you know, they just stand still and don't move. Real exciting, huh?" I get the same enthusiasm when I tell people that I'm interested in studying plants in Graduate School. "Exciting," they say with grimacing faces. Just where is the respect that plants deserve? I think many of us appreciate plants more than we are willing to admit.

First off, if plants are so boring, imagine our lives without them. The landscape would look like the moon. Hey, no plants, no grass, no lawn, no nothing, just a lot of rocks and dirt. What about that American beech that you carved your boyfriend's or girlfriend's initials on? -- Gone. No more shade trees, no more flowers. And for that matter, without plants I guess we wouldn't exist either. End of story. Now **that's** boring.

Maybe I was a little extreme, but it made you think, didn't it? Think about FTD florists. Pick-me up bouquets, etc., etc. That company has made a great business of sending flowers to people. Did you send flowers to your significant other this past Valentine's day? Or did you send him or her a dozen cute fuzzy little rodents? Rodents are more exciting, right, they run around and **move**, flowers can't do that you say. Well, I see your point about animals, but they just can't work in this kind of situation.

Furthermore, plants are cooperative. Yes, cooperative. Every photographer knows, and every painter knows, that they don't move when you try to capture their beauty. All right, if the wind is blowing too hard your photo might get blurred, but other wise they **are** cooperative. Maybe there is some excitement in getting a shot of, say a cheetah or something, but with beginning photographers, plants are just easier to capture. Georgia O'Keefe knew about the sensual beauty of flowers, and her paintings are far from boring. Some critics have gone as far as saying her works are erotic. Wow, plants, erotic? Sounds pretty exciting.

Okay, you got me, yeah, all I've been talking about are flowers and pretty stuff. I haven't gotten to the Poison Ivy or Stinging Nettles, you say. Hey, but what about the bad stuff in the kingdom Animalia -- how many of us can honestly say we love mosquitoes, ticks, chiggers, roaches? (Sorry Dr. Fash-ing) I guess all I'm saying is you don't have to love all plants to appreciate some of them -- just don't knock all plants, plants are pretty darn cool.

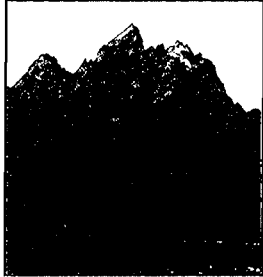


Annie Dillard's *Pilgrim at Tinker Creek*

...and feel the warmth of the moon upon our backs...

Book review by Amanda Allen

Inevitably, I am drawn to mountains. Mountains take my breath away, turn me upside down, and then inside out; there is nothing else like them on earth. Getting to the mountains themselves is not always easy and so I console myself between visits by seeking out reminders of them. Sometimes that takes the form of a photograph or memory, but often I am surprised with a fitting capture of them in some passage of literature. This capturing of



the spirit happened in a passage from Annie Dillard's *Pilgrim at Tinker Creek*. It reads, "You can heave your spirit into a mountain and the mountain will keep it, folded, and not throw it back as some creeks will. The creeks are the world with all its stimulus and beauty; I live there. But the mountains are home." With these few simple lines she touches

the essence of my feelings and she continues to do so throughout her novel. Her verse seizes your soul and returns it enlightened and free.

While her other pieces, including *Holy the Firm*, *Teaching a Stone to Talk*, and *An American Childhood* to highlight a few, are equally mesmerizing, it is *Pilgrim at Tinker Creek* which fulfills every desire for great literature and captured Dillard a Pulitzer Prize. It is no mere treatise on mountains, rather an

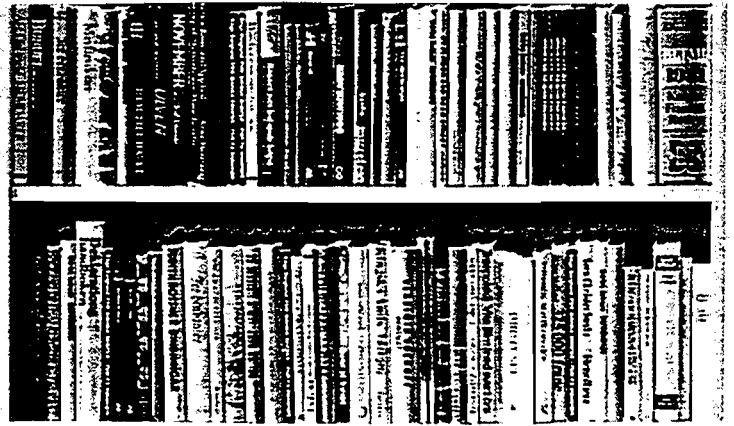


elementary school sampler whose lesson is seeing. Oriented around Radford in southwest Virginia, the story is a natural history ride among the seasons and through worlds of consciousness. We peek into drops of Tinker Creek water only to be amazed at whirling microorganisms, learn the fine art of muskrat stalking, and try to understand the Gordian knot of a shed snakeskin.



As we explore in body we also wander through the mind and tune our perceptions. Within a few chapters we, too, long to see the wind and feel the warmth of the moon upon our backs. Dillard tells us that "nature can reveal as well as conceal" and thus, we must open our awareness, open our eyes, and see. "I see red blood stream in shimmering dots inside a goldfish's tail; I see the stout, extensible lip of a dragonfly nymph that can pierce and clasp a goldfish; and I see the clotted snarls of bright algae that snare and starve the nymph..." I see.

The prize of an aware soul is beauty, wonder, and constant intrigue. "The wonder is --given the errant nature of freedom and the burgeoning of texture in time-- the wonder is that all the forms are not monsters, that there is beauty at all, grace gratuitous, pennies found, like mockingbird's free fall. Beauty itself is the fruit of the creator's exuberance..." As the waters of Tinker Creek, grace flows from Dillard's words. Behold the world surrounding. Behold and be amazed.



What Are Biology Faculty Reading?

What do Biology faculty members read when they are not reading scientific papers and textbooks? **THE NICHE** asked professors to give us the names of one biology and one non-biology book they are now reading or have recently finished. Seven brave readers were not afraid to expose their reading preferences to the community of scholars.

Department Chair Eric Bradley is reading recent Nobel Laureate Toni Morrison's *Tar Baby* and, keeping within his own field of research, *Molecular Endocrinology* by Franklyn Bolander.

Professor Sharon Broadwater is reading what she calls a "sort of biology" book, *Discovering* by Robert S. Root-Bernstein. Her non-biology choice is James Gleick's *Genius*.

Chancellor Professor Charlotte Mangum is reading her own book right now (looking for typos perhaps?), but before that read Gail Mackiernan's *Dissolved Oxygen in the Chesapeake Bay*. She says "it was so-so." Mangum's non-biology "read" is *A Cumberland Childhood* by Jean Ritchie.

Anne Sayre's account of *Rosalind Franklin & DNA* is first-year **Professor Dorothy Reilly's** biology book. Her non-biology choice? *The South for New Southerners*, a "serious sociological study from the University of North Carolina" edited by Paul Escott and David Goldfield. An anonymous reader recommends *How To Speak Southern* to Professor Reilly to help round out the education of a recent arrival from The North.

Professor Carl Vermeulen recommends Lennart Nilsson's *The Body Victorious* and Nigel Calder's *Einstein's Universe*. Sounds like good reading for the new W&M curriculum's general education requirements in Physical Sciences and Biological Sciences.

Floristics and Paleofloristics of Asia and Eastern North America by Alan Graham is what **Professor Stewart Ware** is reading now. He insists it is not a textbook. Ware is continuing to feed his long-standing interest in language and linguistics with *Our Language: A History of English* by Simeon Potter. Professor Ware says, too, that he is "also now reading *The Barber of Seville*, the original Beaumarchais play, not the Rossini opera based on it." There's no telling where piano lessons will lead one.

Professor Lawrence Wiseman is reading *Make Prayers to the Raven: A Koyukun View of the Northern Forest* and *The Transformed Cell: Unlocking the Mysteries of Cancer*, but he admits his nightstand is heavy with partially completed books (one of which is *Games Colleges Play: Scandal and Reform in Intercollegiate Athletics* written by former W&M Professor John R. Thelin who is now at Indiana University in Bloomington).

Life After Millington for 1994 Biology Graduates

The following graduating seniors (about one-third of the Biology group) told **THE NICHE** what they plan to do next year. If you are in the class of '94 and did not respond (*or responded too late*) to our request to find out what you will be doing, please let us know where you will be (with your mailing address) so we can send you the newsletter next year free of charge. Good luck to all our graduates and keep in touch!

Aaron Reeves will be attending graduate school in the Biology Department's Botany Program at Colorado State University. Close by, at least during the summer and early fall season, will be **Betsy Larsen** as a wrangler/trail guide in Rocky Mountain National Park (Editors note: can we go, too?). After guiding trips in Alaska until mid-September (Editors note: can we go, too?), **Christina Nyhus** will be leaving for Mauritania in northwest Africa for a Peace Corps stint in a Disease Control program. **Karyn Kolman** will be with the Sherut La'am for one year in Israel working in the field of ecology. Another possible world traveler, **Heather Wood** will be teaching elementary school either in Warsaw, Poland or somewhere in Virginia.

Heading west is **Erica Dearstyne**, entering the Environmental Toxicology

graduate program at Oregon State University. **Hugo Valverde** has a one-year internship in tropical small farm agriculture and gardening with Educational Concerns for Hunger Organization (ECHO) at Fort Meyers, Florida. In the Fall of 1995, he will be studying Environmental Management at Duke University.

Amy Thompson will begin Ph.D. work in the Department of Molecular Biology at Princeton University. She says her research interests are genetics and developmental biology. **Christopher Sharp** has a Fall internship to do behavioral research and data analysis on cetaceans at the Cetacean Research Unit in Gloucester, Massachusetts. He will then be applying to graduate programs in marine/estuarine/coastal biology and ecology for Fall, 1995.

Fertility Researcher at the Howard and Georgeanna Jones Institute for Reproductive Medicine in Norfolk will be **Christine Warren**'s title next year. **Lori Chaffin** will be doing medical research at either Johns Hopkins or the Oklahoma Medical Research Foundation before applying to medical school, while **Kristin Gould** will be working in a molecular genetics laboratory in the Department of Embryology at The Carnegie Institution in Washington, D.C. and applying for medical school.

Cynthia Vanson will become a Laboratory Specialist in the Department of Toxicology at Medical College of Virginia just up the road in Richmond. Others who will be joining Cynthia at MCV will be first-year medical student **Lakeita Smith** and first-year dental student **Jay Bukzin**.

Going to medical school at UVA are **Kelly Butler**, **Christopher Alan Marek**, and **Seth Roberts**. Also going to UVA Medical School on a Health Professions Scholarship from the United States Navy is **Kristen Albright**. Eastern Virginia Medical School will be home to first-year medical students **Erin Doherty**, **Shannon Miller**, **Adrienne Leigh Prestridge**, and **Michelle Trabert**. Joining his classmates at EVMS --and also planning marriage-- is **Erik Schobitz**.

Other Biology graduates are going to medical school out of state. **Karyn Stocks** is going to the University of Pittsburgh Medical School, **Lance Hoffman** will be at the University of Nebraska Medical Center, **Leanne Yanni** is heading to the SUNY Health Science Center at Syracuse, and **Victoria Currall** will be attending Georgetown University Medical School. **Eric Hamilton Cairns** will be a student at the California College of Podiatric Medicine in San Francisco.

BIOLOGY



WILLIAM & MARY



Mark Christopher Takata will be studying marine biology for one year in Washington, Jamaica, and Massachusetts under the East/West Program offered by Northeastern University. **Adrian Felts** will be seeking employment in the D.C. areas, perhaps with the National Institutes of Health, and **Patricia Houston** hopes to begin work on a Masters Degree in Genetic Counseling.

Natalie Weber and **Megan McCabe**, like many of us, don't yet know what they'll be doing. We wish them the best of luck in discovering something interesting and enjoyable.

And finally there's **Tavis Sipe**, who isn't leaving us at all --at least not yet. Tavis is staying on as a graduate student and teaching assistant in the Biology Department. He will have an opportunity to work with the "Life After Millington '98" group.

The Department wishes the very best to all of our graduates. May you all have long, happy, and productive lives!

THE NICHE

Department of Biology Newsletter



Student Editor: Callan Bentley

Graduate Editor: Amanda Allen

Adviser: Lawrence Wiseman

IN SIMPLE LANGUAGE -- No Pizza Boxes

By Meghan Davis

If you follow Route 60 out past Ben and Jerry's, you'll come to a stoplight near Captain George's. Make a right. Then make a left at the stop sign after you cross the railroad tracks. Follow that winding road for about a mile and you'll find yourself at Ed's.

Ed Swezenborg owns the Williamsburg Recycling Center, open Monday through Friday, 9-5, or Saturday, 9-2. He takes aluminum cans, newspaper, cardboard (both household and corrugated), glass jars and bottles sorted by color, both white and colored office paper (again, sorted), and computer paper. He is also a good friend of the College of William and Mary's recycling program, run by Joe Bieras.

Joe, a graduate of the college who worked with the recycling program as a student, became Recycling Coordinator last year. He is the one who buys all those nifty yellow barrels, hires students to run one or two regular routes a week to pick up what's in them, coordinates volunteers from Alpha Phi Omega, S.E.A.C., and Circle K to help his regular workers, and prints up obnoxious signs to hang over the recycling containers. His latest sign reads, "**IN SIMPLE LANGUAGE--no pizza boxes.**" Ed won't let him recycle pizza boxes in bulk because they would contaminate the whole cardboard load. Too much grease.

Signs are the biggest problem Joe sees with recycling at William and Mary. Because people don't read them and throw trash in recycling containers instead of in trash cans (located right next to the recycling containers), Joe had to stop recycling in the Campus Center. He complains, "We can have a load rejected by the recycling center because there's stuff in there that's not supposed to be there." But what really galls him is the attitude of some students toward recycling. "They tear down my signs!" he agonizes.

Signs aren't the only things they destroy. "This year, I had four containers that were broken on purpose. And it's no coincidence that it usually happens on male halls. But to be fair, this year is the first time I've had trouble with female halls." And he also has had many problems with people putting glass in with cans. "People say, 'It's all going to the same place.' Yeah, but it's going to take longer. When [the students who collect the recycling] go to a place that's been trashed, they have to pick up the area. So the last one or two places on the route do not get picked up and it overflows."

The worst problem he's had with the people on campus who recycle improperly involved the safety of the students who work for him. "We have barrels for cans and glass, but we have fools out there--and I'm going to call them fools, because they have no common sense--who used to play basketball with glass and cans. Several times they missed. First of all, if you're doing glass recycling and you're sorting, you don't want broken glass--you

could cut yourself. And a couple times when they missed, they got broken glass on the sidewalk. We had a student who cut herself and needed stitches on her feet because of the glass. So I had to remove the [glass recycling from those areas]."

But despite the problems, Joe feels that recycling has been going very well. In the past year, William and Mary has recycled almost 20% of the garbage it produces --nearly 700 thousand pounds overall. He points to administration, Office of Residence Life, and most of the students on campus who really want to recycle --and recycle properly-- as the reasons for the success of the program.

Although he no longer takes plastics because his primary vendors stopped accepting them due to a glut in the market, Joe has plans to expand the recycling program. There is now special paper recycling every other week in the

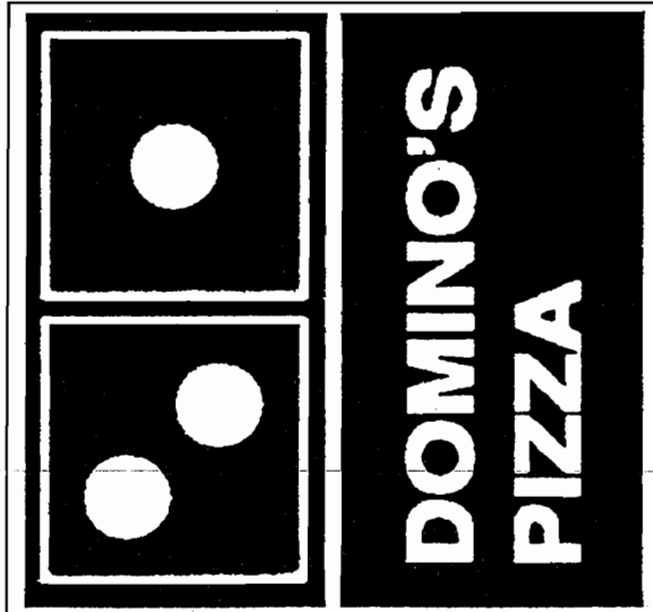
W&M Hall parking lot. "They will take any type of paper --it's user-friendly. Stamps, labels --all that stuff is okay with them." The new University Center has recycling containers on every floor. The Facilities Management building in back of the Campus Center will be renovated starting sometime next year, and the college is also building some dry storage space so his recycling team can pick up more frequently. They won't have to wait until they empty a load at Ed's before they collect another one.

Millington Hall recycling has suffered a setback, however. Joe removed the recycling in the basement for several reasons: "It's not just because of [fire hazard]. It's because all the equipment was in the hallway. We do have paper in the biology library and in the coffee room of psychology. There are barrels for cans on each floor. We will definitely not go back to cardboard at all, because that was the one problem the fire marshal had with me." However, he is not certain that any more recycling at all will return to Millington. There just isn't enough space in areas that have been okay-ed by the fire marshal.

Jewell Thomas helps coordinate Millington recycling. She recycles the cans herself and uses the money for her lab to pay for mailings and other paperwork. She laments the fire code regulations, "There's a lot of dead space in the stairways--it's really too bad we can't use them." She'd also like to see large bins around campus and professors getting more involved and taking some cans and other recyclable goods home to put out for their curbside recycling. But she realizes that her ideas will not come to fruition soon. "When my son was born, the college was talking about how we needed a day care center. We have one--fifteen years later. That's the time scale William and Mary operates on."

William and Mary currently recycles to save money. Joe explains, "Right now, we're paying almost \$50 a ton to get rid of trash. In 6 months, we did a hundred thousand pounds of newspaper --that's 50 tons.

(continued next page)



W&M Students Help Colonial Williamsburg Develop Environmental Tour for Young People

Work began on February 15, 1994, on a tour about the environment for and by young people. This tour, the brainchild of Mr. Terry Yemm, the head gardener for Colonial Williamsburg Foundation, is being developed by youth from area middle schools and high schools and with the participation of three William and Mary students.

Mr. Yemm felt strongly that a tour like this needed to be part of Colonial Williamsburg because of a lack of environmental discussion in other areas of CW. The tour would be a way for many young visitors to get involved with CW, both as tour guides and participation in the tour. The three W & M students, **Troy Weldy, Lara Ackerman, and Natalie Weber**, volunteered to spend a couple hours a week to work with the project's pilot team.

The students from William and Mary are providing some biological help in the project, but are mainly active participants in the group of students developing the tour. Initially, goals and ideas had to be determined by the members of the pilot team. After the brainstorming period, the ideas and goals of the tour became more concrete.

The tour will examine the change that occurred in the environment of the Chesapeake region over the presettlement, colonial, and present times. The tour will focus not only on the changes in pollution, land use, natural resources, and recycling, but will also focus on the ideas and perspectives of the colonists that helped foster their behavior. The pilot team will be responsible for the research of the topics, using information from the Character interpreters of CW and other written primary documentation as well. The tour will be designed to use the sites and structures of Colonial Williamsburg to illustrate the many different ideas.

The designing of the tour will be no easy task; the planning will go through to May 1994, at which point, Mr. Yemm and the pilot group plans to test out the tour on visiting children and school groups. After that point, additional revisions of the tour will need to be made to perfect a tour that will become a permanent part of visiting CW.

No Pizza Boxes

(continued from previous page)

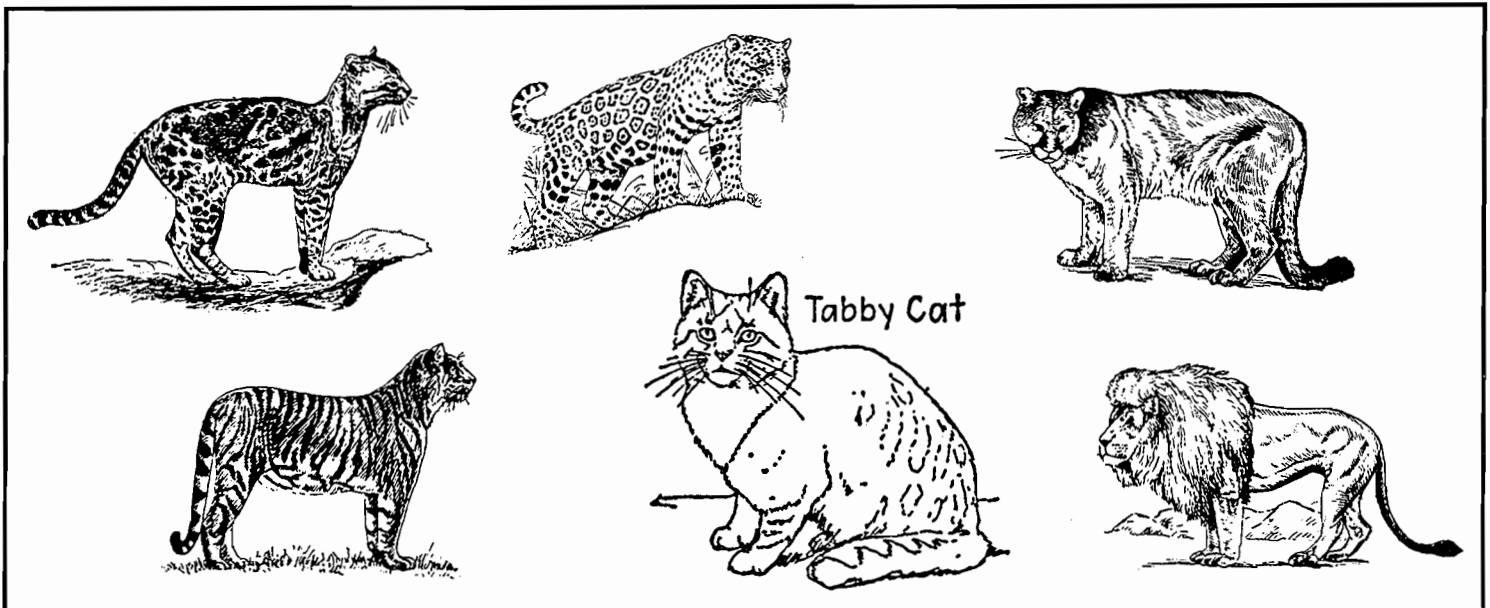
We saved \$2500." Because the James City County landfill is closing soon due to new EPA regulations, the price will probably go up again as William and Mary has to ship its trash even farther. The new guidelines call for a very expensive process to seal the landfill. As Joe describes, "They basically have a zip-lock thing and layers and layers of gravel and stuff to filter the water as it goes down. And you also have to have this plastic liner so that when [the landfill] gets filled, you basically zip- lock it. But it costs between \$50 and \$100 thousand to do this properly, so all the landfills are closing."

Recycling is the answer to the increasing costs of waste disposal. If there are problems with recycling in your area or you have any questions or suggestions, call **Joe Bieras at 221-2274**.

THE TOP TEN REASONS CATS ARE SMARTER THAN DOGS

{Winning entry in TOP TEN contest submitted anonymously}

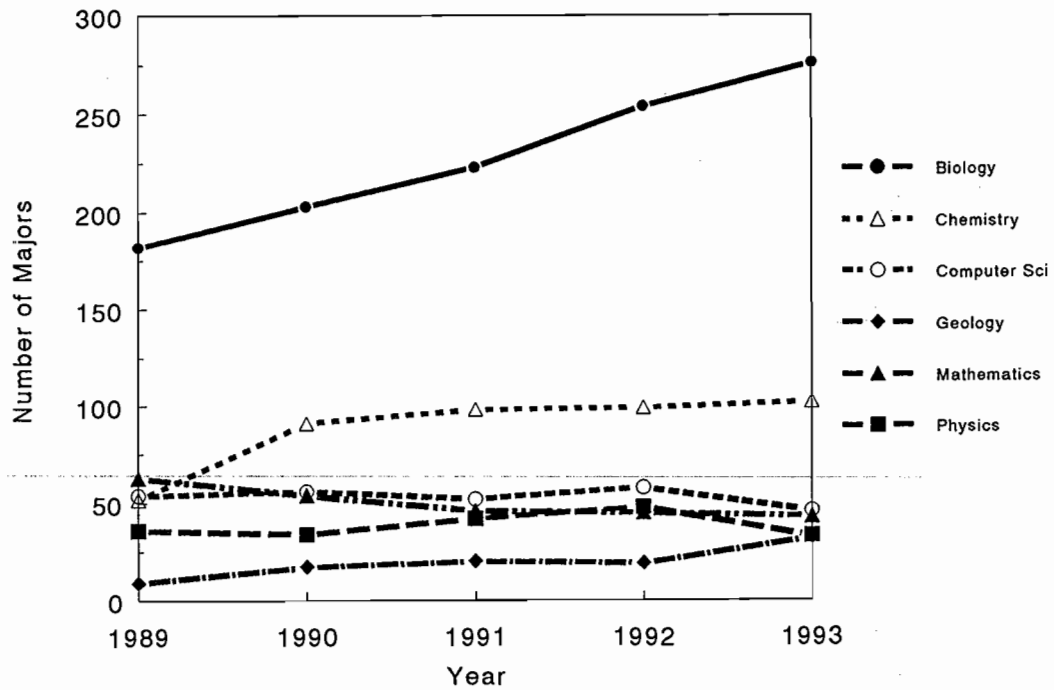
10. ?
9. can't think of anything.....
8. gee whiz, this is tough.....
7. still thinking.....
6. ????
5.
4. hmmm.....
3. probably.....
2. #&%*\$!
1. maybe I'm wrong on this one



THE NICHE

College of William and Mary Department of Biology Newsletter

W&M Enrolled Science Majors (Fall Enrollment)



THE NICHE
Department of Biology
College of William and Mary
P.O. Box 8795
Williamsburg, VA 23187-8795

Non-Profit Org.
U.S. Postage Paid
Permit No. 26
Williamsburg, VA

PRE-SORTED
BULK RATE

TO: