NEW CALENDAR
PROJECTED FOR '74-'75

Hate coming back to fall registration in August? Well, next year Syracuse University and ES&F will be trying out a new schedule and calendar starting with Labor Day as opening day. According to Professor Green, ES&F Registrar, some details are not yet worked out but the general yearly schedule and daily time plans have been officially accepted by both faculties.

The new schedule may meet with some disapproval among both faculty and students. One item that may need individual adjustments is the time factor per semester. Each semester will now be 13 weeks long instead of 15 weeks.

Some major advantages include no Saturday classes and no 8:00 classes. Instead, classes will start at 8:30 and run 55 minutes, ending at approximately 6:00 on MWF. TTh classes will also start at 8:30 and run in 85 minute blocks. Classes will be cancelled on Yom Kippur and will end before Christmas holidays. Due to state legal minimums it was necessary to lengthen each class period.

Another change ES&F students should be aware of is the 3 week deadline for drop-add. If there are major problems with this a student may be allowed to petition.

One problem particular to ES&F students

BLOOD DRIVE - SUCCESS

The blood drive on February 8 sponsored by Kappa Phi Delta and Hungry Charley's was quite successful. The Red Cross collected 188 pints of blood for distribution throughout the area. The large turnout kept the Red Cross personnel busy the entire time of the drive. Each donor received a coupon good for a free beer at Hungry Charley's which they should use in the near future. The Red Cross people and Kappa Phi Delta thank all those who helped in making the drive a success.

ROBIN HOOD PHOTO CONTEST

Start taking photos now for the upcoming Robin Hood Photo Contest. This contest, sponsored by Alpha Xi Sigma and Robin Hood, offers cash prizes for winning photos. See Forestry campus bulletin boards for details or call Bernard Davies (at 475-9196), or Betty Ann Hughes (at 474-2329).
CALENDAR...

will be the scheduling of labs according to the new time blocks. Some labs may run a little longer than in the past. Also coordinating those courses required by freshmen and sophomore forestry students at SU and courses and labs at Forestry may cause some initial difficulties.

Three committees of the SU Senate, in which we do have representation, were involved in the planning of the new schedule. Chancellor Eggers and President Palmer, plus V. President Anderson and both registrar's offices were also involved in the final planning.

Although basically SU drew up the new schedule and then presented it to the ES&F administration there are obvious advantages to working with SU in scheduling and not remaining on our own previous calendar.

In the future Vice-President Anderson of ES&F will be doing the negotiating with SU on future changes. The schedule and calendar were accepted on a one year experimental basis but it is believed SU is projecting plans for 4 or 5 years.

Mary LaLonde

TYING ROOM...

With proper care and handling, these machines can provide long and lasting service to the student body. Your cooperation is appreciated.

PEACE CORPS
FORESTERS

During the past year more and more countries have requested Peace Corps volunteers in the field of forestry and other environmental sciences. This spring and summer more than a dozen countries would like to host about one hundred volunteers in these fields.

For example, Ghana has requested people with degrees or expertise in wildlife management, silviculture, wood science, tree breeding, forest entomology and zoology. Brazil is seeking volunteers to work in forestry, conservation, wildlife management, zoology, hydrology and air pollution. Cameroon requests people in fishery sciences. Landscape architects are needed in Iran.

Several years ago, Mike Knudson, now a

Continued on p. 3

TEACHING AWARDS

Alpha Xi Sigma and Robin Hood have been asked to serve as the student search committee for nominees for a Distinguished Teaching Professorship and for Chancellor's Awards for Excellence in Teaching. Nominees must be from the College of ES&F, and may be from any school in the College. Other criteria are as follows:

Distinguished Teaching Professorship
1. Associate professor or professor with at least 3 years fulltime teaching on this campus.
2. A superb teacher.
3. Keeps up-to-date in his/her field.
4. A good advisor; accessible to students.
5. Sets high standards and helps students achieve them.
6. A fair grader.
7. Carries a normal teaching load.

Chancellor's Award for Excellence in Teaching
1. Any academic rank; at least 1 year's fulltime teaching on this campus.
2. Otherwise, same as for Distinguished Teaching Professorship.

If you've got any suggestions, please give them to Tom Tobin or myself through student mail. Deadline is Feb. 20 for the DTP, and March 20 for the Chancellor's Awards.

Ann Groot

THE NATURAL GAS—THE NATURAL WAY

Yes, folks, the age of gasoline is coming to an end. The development of alternative fuel resources has suddenly become a matter of top priority into which billions of dollars are being poured. Yet, how many people realize that every time they flush a toilet, they are throwing away a potential source of the natural gas that is allegedly in such short supply? The relatively simple concept of recycling our own organic wastes just could be our greatest hope for the rather bleak looking future ahead.

The name of the game is "bio-gas"—a mixture of methane and other gases which is given off during the anaerobic decomposition ("digestion") of organic waste mater-
ACE CORPS...

Juate student in World Forestry, worked a volunteer in the forestry program in Morocco, in North Africa. His work involved the disciplines of Watershed Management and Soil Conservation in a semi-arid climate. French and Arabic are the languages spoken there. At that time there were about a dozen foresters working in Morocco in the Peace Corps, and many of them spent most of their time in the field, living and working out of small villages and tents. If you are interested in similar work, you may see Mike in Room 15, in the basement of Marshall Hall.

In addition, on February 25 and 26, Tony Ganey, the Peace Corps Representative for this area will be in the basement of Marshall Hall to talk with seniors and graduate students who might be interested in these programs.

NATURAL GAS...

It's very similar in composition to the natural gas which now heats many homes, and has a heat value of about 600 B.t.u. per cubic foot. Bio-gas is certainly nothing new. For many thousands of years, nobody paid much attention to the "swamp gas." But since World War II, many people have become interested in producing methane from manure and farm wastes (notably Ram Bux Singh in India and L. John Fry in South Africa). Their experiments have proved the feasibility of this process. The most extensive development of bio-gas has probably occurred in India, where over 2500 "gobar gas" plants are now in operation.

There is no question now that, in farm communities, the "digestion" of livestock manure is a practical and valuable source of power, heat, and high-nitrogen fertilizer. The challenge now is to extend the process to the cities and the millions or billions of tons of human waste produced yearly.

The recycling of urban sewage sludge into methane gas and fertilizer would have many very obvious benefits. Sludge would stop creating disposal problems and become a valuable natural resource. Many cities are already delivering their raw or composted sludge to farmers for use as high quality organic fertilizer. If this sort of recycling were coupled with the production of methane gas, the profits would be doubled. Besides helping to produce food energy, the sludge would be providing energy for heating homes, turning generators, and possibly even powering cars and trucks.

John Grey on Zoos-2/21

Have you ever been to a zoo, and seen animals contained by a moat rather than a fence or cage? It seemed great, no artificial barriers, the animal wouldn't feel as caged in. However, the director of Burnet Park Zoo, John Grey, (graduate of ES&F) believes moats are not good for animals, because they offer no psychological barrier protecting the animal from its human viewers, with a fence between you and the animal, the animal knows he is safe.

Thursday, February 21, at 7:30 in room 5 Illick, the Zoology Club will sponsor a lecture given by John Grey. Mr. Grey will speak on using animal behavior as a zoo management tool. He will discuss such aspects as: the handling of animals using their behavioral characteristics, the manipulating of animals by flight-fright patterns, the value of psychological barriers, and behavioral considerations in designing animal habitats.

Refreshments will follow the lecture. Zoology Club patches are available to all students who believe they are involved in the club. All students who would like to run for club offices next year should see Katie or Dianne after the meeting.

So come on out. Everyone is invited, Thursday February 21, at 7:30 in 5 Illick. Come and see how all thr things you learn about, really work.

Pollution of waterways by municipal sewage would cease to be a problem. If methane became a wide-spread substitute for fossil fuels, air pollution would be greatly reduced, since methane gas is very clean burning.

The basic process of bio-gas production is actually quite simple—bacteria do most of the work. Manure, plant material, or other organic wastes are mixed with water into a "slurry," then sealed in a tank and held at a temperature favorable to the desired bacteria (85-105 deg. F.). As the gas is produced, it is either burned immediately or stored in a tank or bottles for future use. Of course there are many factors that determine the relative efficiency of a digestion plant, and much of the technology needed for efficient gas production has yet to be developed.

Just as many trucks now run on propane (liquified petroleum gas), bio-gas can be compressed and used to power automobiles.

Continued on p. 4
NATURAL GAS...

Some ambitious individuals (like Harold Bates in England) have already proven this. Though some experts feel this is an impractical use of the fuel (due to the amount of energy required to compress it), the matter is still open to research and should be seriously considered, especially now that it looks like our cars will soon be running out of gasoline.

Since the possible benefits of using sewage as an energy source are so great, it is surprising that relatively few Americans are aware of them. While billions of dollars are being spent on the development of incredibly dangerous and impractical sources of power like atomic energy, relatively little research is being done into the safe, practical, and natural process of methane gas production. The word is beginning to spread, however. Tennessee State University has recently been awarded $59,610 by the USDA to study the production of methane gas from livestock manure and crop residues. (See Organic Gardening and Farming, Feb. 1974.) This is encouraging but it still appears that very little is being done on methane production from human waste and sewage sludge.

Yes, Ve, There are Room Reservations!

Have you ever gone to a meeting somewhere on campus, and discovered that it wasn't taking place where you thought it was? Or have you ever sat in a room waiting for a meeting to start and been kicked out by another group? If you have experienced this, you know the feeling of extreme annoyance that accompanies such an event.

There are ways to avoid this, however. It can be done by a simple process called, Reserving a Room. There are several different procedures, but none are difficult.

Procedure No. 1: To reserve Nifkin Lounge. Nifkin Lounge reservations are handled by your Student Association in the person of the Second Vice-President. If you want to reserve the lounge, contact George Ellis (x3-2768) and obtain a form. Fill out the form, get the necessary signatures, and return it to George. He'll let you know if you can use the lounge or not. Please try to get these things done at least 10 days in advance of an event.

Procedure No. 2: Reserving a Classroom, Auditorium, etc. With the exception of seminar rooms, any other room reservation is taken care of by Mrs. Putt in room 111.

Procedure No. 3: Reserving Seminar Rooms. Seminar rooms are handled by the individual department. If you want to use one, just go to the department office and ask.

By following these simple procedures, a lot of unnecessary grief and misunderstandings can be avoided. It makes everyone a little happier.

Hopefully, the "powers that be" will realize before it is too late that the only realistic solution to the fuel problem is one which respects the delicate balance of nature and fits into some kind of natural cycle. The greatest priority should be given to the development of such energy sources as solar, wind, water, and geothermal power, and bio-gas production. It is only with fuel sources such as these that modern civilization can possibly hope to continue.

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If you want to read more about bio-gas, I recommend the following:

The Mother Earth News—
#3 ("How to Generate Power from Garbage")
#10 ("The Marvelous Chicken Powered Motorcar")
#23 (interview with L. John Fry)

The Mother Earth News recommends the following authoritative works:

Bio-Gas Plant and Some Experiments with Bio-Gas by Ram Bux Singh, available for $5.00 from Ram Bux Singh, Gobar Gas Research Station, Ajitmal, Etawah (U.P.). India.
Methane Digesters by L. John Fry and Richard Merrill, available for $3.00 from L. John Fry, 15 W. Anapamu St., Santa Barbara, California 93101.

Bob Leviton

TOYS NEEDED

The Cystic Fibrosis Clinic is collecting toys for children at the clinic. If you have any used toys, please take them to Ellen Gural in the Bulletin Room in the basement of Bray Hall anytime.

Bray Hall. Just go to her and find out if a room will be free when you want it, and if it is, she'll arrange for you to use it.

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SUMMER JOBS IN EUROPE

Luxembourg, Europe-English pubs and inns, and hotels and restaurants in Wales and Scotland are offering summer jobs to American college students. Paying summer jobs are also available in lakeside resorts and city hotels and restaurants in Austria, Switzerland and France. Irish homes are open to American college girls who would like to live and work for their keep in traditional Ireland with a traditional Irish family.

Any student may apply, and the jobs are given on a first come, first served basis. Jobs, working papers, room and board arrangements, and other necessary paperwork are processed in advance on a non-profit basis by the Student Overseas Service—a student run organization which has specialized in student help and student work projects for the past 16 years. Although standard wages are paid, SOS says the free room and board is the biggest advantage for students.

Many students are signing up to combine a summer job in Europe with a bicycle tour of Europe. This means students will be taking to the roads to bicycle around Europe before or after working at a paying job in Europe to earn back most of their trip costs. SOS has organized a number of different bicycle trips. One tour is through the Champagne country of France—not exactly a sobering thought—ending up in Paris with its intoxicating sights, history and excitement. Sometimes a van with luggage accompanies the tour, but individual students can opt for only a new bike, a map, and a "survival packet."

When students bicycle in a group, overnight accommodations at country inns and

The knothole is the student publication of the SUNY College of Environmental Science and Forestry. Published every Thursday. Any articles, notices, stories, letters, etc. to be published must be submitted in the knothole mailbox in the basement of Marshall Hall before noon on Saturday, signed. Names will be withheld upon request. Anyone wishing to join the knothole staff should contact one of our members. Staff meetings are Wednesday nights at 7:00 PM in the Library Informal Study Room.

The Organic Compost

One of the most frequently asked questions concerning organic gardening deals with use of compost piles. The compost heap is one of the corner stones of good gardening. IT returns to the soil many of the nutrients taken away at harvest time. Almost anything can be thrown in the heap; weeds, grass clippings, kitchen garbage and junk left over from the garden itself are real good. Some soil should also be thrown in to get healthy microorganism populations going. The pile should be mixed up once in a while so the whole thing is thoroughly composted. If properly done, the compost should have a temperature of about 160 degrees F; this is high enough to discourage rodents and destroy most disease organisms.

When the composting is complete the material should be black and crumbly and slightly acid. When applied to the soil it will improve the soil structure as well as increase the aeration, water holding capacity, and available nutrients. Your plants will do better and no chemical fertilizers are necessary. The compost, when used as a mulch, will also keep down weeds.

The compost heap is a real inexpensive way to recycle your wastes and fertilize your garden at the same time. It seems a very sensible thing to do in the face of shortages in the fertilizer industry, high food prices, and lack of landfill sites for the tremendous volume of garbage generated by society.

Tom Zelker

Dissection Woe

A General Zoology student, seeking a lab partner for the vertebrate dissection, posted the following notice outside the Learning Center in Illick Hall:

Free on Monday, Wednesday and Friday afternoons after 1:00PM—will gladly do frog, willing to do a perch, could tolerate a turtle, REFUSE to touch aborted piglet or bird.

Call Marc 422-

We hope he found a partner!

Dr. Larry VanDruff
Enrollments may be off in many U.S. colleges, but not so in much of Europe and particularly in West Germany. Though comparatively few German youngsters bother to finish the equivalent of high school (the majority either drop out or go into apprentice programs), the prospects are bleak indeed for the 85,000-odd elite students who annually do pass the stiff examination for an *Abitur* —the certificate that theoretically entitles them to automatic admission to a university. Last year alone, some 36,000 of these students passed their exams and then found that there was simply no room for them at the German universities.

Recently, Christian Schwarz-Schilling, a state deputy from Hesse, came up with what seemed to him the obvious solution: why not fill empty American classrooms with surplus German students? He found a good deal of enthusiasm for the plan in the U.S., where fully 600 vacancy-ridden colleges are eager to take the German students.

But many German educators think American colleges are simply not up to the standards of German students. In the U.S., a student holding an *Abitur* would be roughly at the level of a college junior. And this, compounded by the language barrier, has led the educators to wonder whether Schwarz-Schilling's exchange plan should even be tried. *Die Zeit*, a respected weekly newspaper, recently summed up one German view of the quality of higher education in the U.S. "It might even be better," the editors suggested, "to become a German office clerk or a manual worker."

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**STATE OF THE ENVIRONMENT**

The fourth annual report of the Council on Environmental Quality, *which documents the current state of the environment*, has recently been released. The report covers problems of the urban environment; the economics of environmental management; the law and land use regulation; international action to protect the environment, and trends in air, water, noise, solid waste, energy and land use improvement. The citizen's role in environmental action is also outlined.


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**EUROPE...**

small hotels are strategically planned between hostel stays or simply sleeping under the stars. A special feature of SOS bike tours is that a new European bicycle is included in the deal for anyone who wishes, and put on an airplane and sent home with the student.

Interested students may obtain application forms, job listings and description, and the SOS Handbook on earning your way in Europe by sending their name, address, name of educational institution, and $1 (for postage, printing, handling and addressing only) to either SOS-Student Overseas Services, Box 5173, Santa Barbara, Calif. 93108, or to S.O.S., 22 Ave. de la Liberte, Luxembourg, Europe.

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**Are the Germans Coming?**

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Newsweek, January 14, 1974
PUZZLE

There is a bridge that can withstand 180 lbs. of weight without collapsing. A man, weighing 150 lbs., must cross the bridge with 4 bricks, weighing 10 lbs. apiece. How does he do it without breaking the bridge?
(Send your answer to the Knothole via student mail. The answer will be published next week.)

EDITORIAL POLICY:
The Knothole appreciates any articles, short stories, poems, letters, etc. which anyone might be inclined to submit. However, all such literature must be signed. Name will be withheld on request of author.
The ES&F Calendar of Events is a service of The Knothole intended to list all faculty and College related events for the week in one place. If your organization is having a meeting, speaker, movie, special event or whatever that you want publicized, contact the Knothole by student mail.

*Thursday, February 21*
7:30 pm, John Grey, Director of Burnet Park Zoo will speak at the Zoology Club meeting. 5 Illick
4 pm, Dr. Sidney Smith of Immunology Research, Schering Corporation will speak on "Impairment of T-cell Function in Menatode Infected Rats." 117 Lyman Hall

*Friday, February 22*
9 pm-1 am, Freshman class will sponsor a dance-party affair in Nifkin Lounge. Admission $.25, free wine punch, 5¢ beer. Band is Main Street

*Mollet Club Calendar*

*Wednesday noon meetings*

*Saturday, February 23*
Party for entire campus in Noble Room, Hendricks Chapel.

*February 27-March 4*
Labash at Pomolia, California

*March 19-21*
Field trip to Pittsburgh

*April*
Albrecht lecture (date not determined)

*Thursday, February 28*
6:30 pm, Alpha Xi Sigma and Robin Hood will meet in 321 Bray.

*Thursday, February 28*
4 pm, SU Biology Seminar—Dr. Vithal K. Ghanta of U. of Alabama will speak on "An Approach to Establish Total Number of Disseminated Tumor Cells in the Body of an Animal"
117 Lyman Hall

*Monday, Tuesday* February 25 & 26
The Peace Corp will be available on campus outside Nifkin Lounge.

**Crossword puzzle**
YEARBOOK QUESTIONNAIRE

Please think about these questions and answer them as well and as honestly as you can.

1. Year in school: 9 freshman 21 sophomore 44 junior 57 senior 3 graduate 1 faculty TOTAL = 159

2. Do you think the College of Forestry should have a yearbook? 123 yes 6 no 5 no opinion

3. Undergraduates—Did you pick up your yearbook this year? 127 yes 17 no

4. If you did pick up your yearbook (or if you at least saw one):
   What was your overall impression of the yearbook? 1 excellent 49 very good 56 good 8 fair 4 poor 4 no opinion

5. Are you aware that the yearbook is paid for by student fees? 127 yes 1 no

6. Would you be willing to pay for your yearbook, some amount? 68 yes 55 no 5 no opinion
   If so, how much would you be willing to pay? 250¢ 9 $1.00 28 $2.00 21 $3.00 12 $ or more

7. Would you like to see color photography in the yearbook? 95 yes 38 no 16 no opinion

8. Do you think the use of "second color" should be continued (e.g., the red tones in the Barbeque section)? 75 yes 46 no 3 no opinion

9. Was there adequate coverage of events at the College? 47 yes 67 no 14 no opinion
   Was there adequate coverage of clubs and other activities? 38 yes 80 no 17 no opinion
   If not (for both preceding questions), what was missing?

10. With regard to club pictures, would you rather see a group line-up 24, or the group involved in a club activity 12?

11. What did you think of the copy (text)? 3 excellent 47 very good 20 good 16 fair 10 poor 10 no opinion
   Was there enough text? 49 yes 51 no 24 no opinion

12. What did you think of the cover? 7 excellent 27 very good 43 good 23 fair 13 poor 10 no opinion

13. What type of pictures would you like to see more of? 1/3 candids 63 formal groups (not including senior photos) 24 special effects (e.g., pages 16, 26-27, 28)
14. Would you like to see a listing of seniors' activities? *yes 54 no 17 no opinion
addresses? 24 yes 21 no 13 no opinion

If yes, where do you feel these should be located?
63 back of the book
57 under the senior's photograph

15. As a senior, would you be willing to pay a sitting fee for your senior portrait($1.50)? *yes 51 no 10 no opinion

16. Do you favor advertisements in the yearbook to help finance it? *yes 54 no 17 no opinion

If yes, would you prefer only forestry related ads or any combination of ads?

17. Comments:

18. Interested in working on some aspect of the yearbook? If so, please put your name and phone number on the bottom of this sheet so we can contact you.

Deposit finished questionnaires in the marked boxes either in Moon Library on the front tables (by card catalogues) OR in Nifken Lounge in the basement of Marshall Hall.