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EARTH DAY 2004 NEWS

THE HISTORY OF EARTH DAY

BY KATHLEEN HUTCHINSON '04

WHEN DID EARTH DAY BEGIN, AND WHAT WAS ITS DRIVING FORCE? TO BEGIN, SENATOR GAYLORD NELSON FOUNDED EARTH DAY, AND ACCORDING TO HIM, THE IDEA FOR EARTH DAY EVOLVED OVER A PERIOD OF SEVEN YEARS BEGINNING IN 1962. SENATOR NELSON WAS TROUBLED FOR MANY YEARS OVER THE "STATE OF OUR ENVIRONMENT," CONCERNED THAT THE ENVIRONMENT WAS A NON-ISSUE IN THE POLITICAL ERA OF THE TIME THROUGHOUT OUR COUNTRY. THEN, IN NOVEMBER OF 1962, HE HAD AN IDEA THAT HE FELT WOULD "PUT THE ENVIRONMENT INTO THE POLITICAL "LIMELIGHT" ONCE AND FOR ALL." HIS IDEA WAS TO PERSUADE THEN PRESIDENT KENNEDY TO SUPPORT THIS IMPORTANT ISSUE BY GOING ON A NATIONAL CONSERVATION TOUR. APPARENTLY, ATTORNEY GENERAL ROBERT KENNEDY LIKED HIS IDEA AND SO DID THE PRESIDENT.

SO THE PRESIDENT WENT ON A FIVE-DAY, ELEVEN-STATE CONSERVATION TOUR IN SEPTEMBER OF 1963. UNFORTUNATELY, THE TOUR DID NOT SUCCEED IN PUTTING THE ISSUE ONTO THE NATIONAL POLITICAL LIMELIGHT; HOWEVER, IT DID SUCCEED IN GERMINATING THE IDEA "THAT ULTIMATELY FLOWERED INTO EARTH DAY."

SENATOR NELSON CONTINUED TO SPEAK ON ENVIRONMENTAL ISSUES TO A VARIETY OF AUDIENCES IN TWENTY-FIVE STATES. ACCORDING TO SEN. NELSON, HE SAW EVIDENCE OF ENVIRONMENTAL DEGRADATION EVERYWHERE HE WENT, AND EVERYONE SEEMED TO NOTICE **EXCEPT** THE POLITICIANS. "THE ENVIRONMENTAL ISSUE SIMPLY WAS NOT TO BE FOUND ON THE NATION'S POLITICAL AGENDA. THE PEOPLE WERE CONCERNED, BUT THE POLITICIANS WERE NOT."

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EARTH DAY

THURSDAY, APRIL 22, 2004 –
"EARTH DAY"

11-1 PM -ALL CAMPUS EARTH DAY PICNIC

NOON-3 PM -ART SOCIETY & RE-PLACE:

TRASH TO TREASURE-SCULPTURE COMPETITION WITH RECYCLED MATERIAL

-ART SOCIETY: MURAL PAINTING

-Trexler Game Preserve/Conservation Club:

BIRDS OF PREY

-Wildlands Conservancy: LIVE ANIMALS

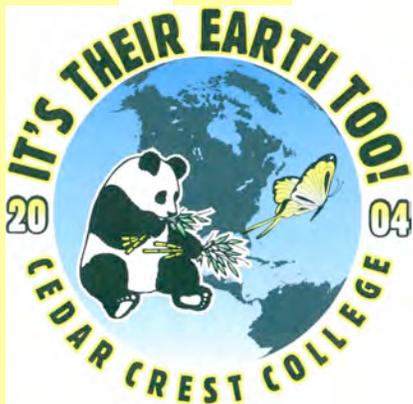
-Conservation Club: PLANT SALE

4-5 PM -Lindsay Kendall '02 "TO THE BOTTOM OF THE WORLD AND BACK AGAIN: AN ANTARCTIC ADVENTURE IN MOLECULAR MARINE BIOLOGY." (Miller 33)



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ACCORDING TO SEN. NELSON, "THE AMERICAN PEOPLE FINALLY HAD A FORUM TO EXPRESS ITS CONCERN ABOUT WHAT WAS HAPPENING TO THE LAND, RIVERS, LAKES, AND AIR."

WHEN PRESIDENT KENNEDY FINISHED HIS TOUR, SEN. NELSON HAD STILL HOPED FOR AN IDEA THAT WOULD "THRUST THE ENVIRONMENT INTO THE POLITICAL MAINSTREAM." SIX YEARS LATER, THE IDEA FOR EARTH DAY OCCURRED TO HIM WHILE HE WAS ON A CONSERVATION SPEAKING TOUR OUT WEST IN THE SUMMER OF 1969. DURING THIS TIME, ANTI-VIETNAM WAR DEMONSTRATIONS, CALLED "TEACH-INS," SPREAD TO COLLEGE CAMPUSES ALL ACROSS THE NATION. IT WAS AT THIS MOMENT THAT SEN. NELSON CAME UP WITH AN IDEA — "WHY NOT ORGANIZE A HUGE GRASSROOTS PROTEST OVER WHAT WAS HAPPENING TO OUR ENVIRONMENT?"

SEN. NELSON STATES: "I WAS SATISFIED THAT IF WE COULD TAP INTO THE ENVIRONMENTAL CONCERNS OF THE GENERAL PUBLIC AND INFUSE THE STUDENT ANTI-WAR ENERGY INTO THE ENVIRONMENTAL CAUSE, WE COULD GENERATE A DEMONSTRATION THAT WOULD FORCE THIS ISSUE ONTO THE POLITICAL AGENDA. IT WAS A BIG GAMBLE, BUT WORTH A TRY."

SO AT A CONFERENCE IN SEATTLE IN SEPTEMBER OF 1969, SEN. NELSON ANNOUNCED THAT IN THE SPRING OF 1970 "THERE WOULD BE A NATIONWIDE GRASSROOTS DEMONSTRATION ON BEHALF OF THE ENVIRONMENT," AND HE INVITED EVERYONE TO PARTICIPATE. THIS SET OFF A CHAIN REACTION OF WIRE SERVICES THAT CARRIED THE STORY FROM COAST TO COAST. APPARENTLY, THE RESPONSE HE RECEIVED WAS SHOCKING. HE RECEIVED TELEGRAMS, LETTERS, AND

TELEPHONE INQUIRES FROM ALL ACROSS THE COUNTRY.

NOW, ACCORDING TO SEN. NELSON, "THE AMERICAN PEOPLE FINALLY HAD A FORUM TO EXPRESS ITS CONCERN ABOUT WHAT WAS HAPPENING TO THE LAND, RIVERS, LAKES, AND AIR."

THEN, ON SUNDAY, NOVEMBER 30, 1969, FIVE MONTHS BEFORE THE OFFICIAL START OF EARTH DAY, THE NEW YORK TIMES PUBLISHED A LENGTHY ARTICLE BY GLADWIN HILL REPORTING ON "THE ASTONISHING PROLIFERATION OF ENVIRONMENTAL EVENTS". SHE WROTE:

"RISING CONCERN ABOUT THE ENVIRONMENTAL CRISIS IS SWEEPING THE NATION'S CAMPUSES WITH AN INTENSITY THAT MAY BE ON ITS WAY TO ECLIPSING STUDENT DISCONTENT OVER THE WAR IN VIETNAM...A NATIONAL DAY OF OBSERVANCE OF ENVIRONMENTAL PROBLEMS...IS BEING PLANNED FOR NEXT SPRING...WHEN A NATIONWIDE ENVIRONMENTAL 'TEACH-IN'...COORDINATED FROM THE OFFICE OF SENATOR GAYLORD NELSON IS PLANNED...."

SEN. NELSON STATED THAT "EARTH DAY WORKED BECAUSE OF THE SPONTANEOUS RESPONSE AT THE GRASSROOTS LEVEL. WE HAD NEITHER THE TIME NOR RESOURCES TO ORGANIZE 20 MILLION DEMONSTRATORS AND THE THOUSANDS OF SCHOOLS AND LOCAL COMMUNITIES THAT PARTICIPATED. THAT WAS THE REMARKABLE THING ABOUT EARTH DAY. **IT ORGANIZED ITSELF.**"

(SOURCE: [HTTP://EARTHDAY.WILDERNESS.ORG/HISTORY/](http://earthday.wilderness.org/history/))



EARTH DAY SCHEDULE, CONT.



FRIDAY, APRIL 23, 2004

CHILDREN'S EVENTS RELATED TO EARTH DAY

1-6 PM (ON THE VERANDA OF TCC AND NEIGHBORING EAST LAWN)

- “THE GREAT KAPOK TREE” PERFORMED BY ALPHA PSI IN THE GREEK THEATER.
- PAINT ON RECYCLED TILES, SPONSORED BY THE ART SOCIETY
- FACE PAINTING, TIE-DYE YOUR EARTH DAY T-SHIRT, HAVE YOUR PICTURE TAKEN WITH AN ENDANGERED ANIMAL, PLANT SALE, AND GENERAL EARTH DAY INFORMATION TABLE (FOR ADULTS & CHILDREN), SPONSORED BY THE CONSERVATION CLUB
- COME PLAY WITH WORMS IN THE DIRT, SPONSORED BY THE DISCOVERY CENTER
- LIVE ANIMALS, FROM THE WILDLANDS CONSERVANCY AND THE GREAT VALLEY NATURE CENTER
- LEARN ABOUT OPPORTUNITIES TO VOLUNTEER, FROM THE TREXLER PARK GAME PRESERVE
- PLAY WITH A LARGE PARACHUTE AND HUGE BASKETBALL AND HOOP WITH THE FORENSIC SCIENCE CLUB

3:30 PM MAKE SUNPRINTS WITH SAB



MYTHS AND FACTS OF LITTER AND TRASH

BY KATHLEEN HUTCHINSON '04

HAVE YOU EVER DRIVEN DOWN A LITTERED ROAD AND WONDERED HOW LONG IT WOULD TAKE FOR THAT SODA CAN TO BIODEGRADE? HAVE YOU EVER STOPPED AT AN INTERSECTION AND NOTICED THOUSANDS OF CIGARETTE BUTTS LYING ON THE GROUND AND ASKED YOURSELF HOW LONG THEY WOULD STAY THERE BEFORE THEY DEGRADED INTO THE GROUND? WELL, I THINK ABOUT THIS EVERY TIME I DRIVE DOWN THE HIGHWAY AND SEE SHOPPING CARTS, ASSORTED PLASTIC ITEMS, AND DISCARDED FAST FOOD BAGS FREELY LYING ABOUT. SO I DECIDED TO DO A LITTLE RESEARCH TO FIND OUT HOW LONG IT WOULD TAKE FOR SOME OF THAT STUFF TO BIODEGRADE, IF NO ONE EVER PICKED THEM UP. HERE IS THE GENERAL CONSENSUS FROM NUMEROUS SOURCES:

PRODUCT: TIME IT TAKES TO DEGRADE

COTTON RAGS:	1-5 MONTHS
PAPER:	2-5 MONTHS
ROPE:	3-14 MONTHS
ORANGE PEELS:	6 MONTHS
WOOL SOCKS:	1-5 YEARS
CIGARETTES:	1-12 YEARS
PLASTIC COATED PAPER	
CARTONS:	5 YEARS
PLASTIC BAGS:	10-20 YEARS
LEATHER SHOES:	25-40 YEARS
NYLON FABRIC:	30-40 YEARS
TIN CANS:	50-100 YEARS
ALUMINUM CANS:	80-100 YEARS
PLASTIC 6-PACK HOLDER	
RINGS:	450 YEARS
GLASS BOTTLES:	1 MILLION YEARS

PLASTIC BOTTLES: ???-NEVER

(SOURCE:
[HTTP://WWW.RECYCLE.UBC.CA/LITTER.HTML](http://www.recycle.ubc.ca/litter.html))

AS DISTURBING AS THIS INFORMATION IS, WHAT'S EVEN MORE DISTURBING IS THE ATTITUDE PEOPLE TAKE TOWARDS THIS SUBJECT. ASKED IF THEY CARE ABOUT LITTER OR TRASH, MOST PEOPLE WOULD PROBABLY SHRUG THEIR SHOULDERS AND SAY



COMMUNITY SERVICE



ADOPT
-A-
HIGHWAY
T-SHIRTS

"YOU'LL
EARN THIS
T-SHIRT"



"IT'S NOT MY PROBLEM" OR
"WHY SHOULD I CARE"?

WELL, IF YOU ARE ONE OF THESE
PEOPLE, THEN HERE ARE SOME
MYTHS AND FACTS ABOUT
LITTER AND TRASH:

MYTH: LITTER CONTROL IS NOT
IMPORTANT.

FACT: LITTER MAY NOT BE THE
MOST DRAMATIC OR EXCITING OF
THE MANY PROBLEMS THAT
THREATEN THE QUALITY OF OUR
ENVIRONMENT, BUT IT IS A
PROBLEM WHICH AFFECTS
EVERYONE IN THE COMMUNITY

MYTH: NO ONE NOTICES
LITTER.

FACT: LITTER DESTROYS
THE BEAUTY OF A
COMMUNITY. TOURISM IS AN
IMPORTANT PART OF
PENNSYLVANIA'S ECONOMY.
PEOPLE COME FROM ALL OVER
THE WORLD TO SEE THE BEAUTY
OF OUR COUNTRYSIDE, TOWNS
AND CITIES. WHEN LITTER MARS
THEIR ENJOYMENT,
PENNSYLVANIA LOSES
VALUABLE TOURIST DOLLARS.

MYTH: LITTER DOESN'T HURT
ANYONE.

FACT: LITTER IS A SAFETY
HAZARD. LITTER IS A BREEDING
GROUND FOR FIRE AND DISEASE.
FACT: LITTER IMPACTS CAR
INSURANCE RATES BECAUSE
THOUSANDS OF AUTO
ACCIDENTS ARE LITTER-RELATED.
FACT: INGESTING LITTER
CAUSES INJURY OR DEATH TO
THOUSANDS OF PETS, WILD AND
FARM ANIMALS.

FACT: LITTER IS A BREEDING
GROUND FOR RATS AND
DISEASE-CAUSING BACTERIA.

MYTH: LITTER DOESN'T AFFECT
THE ECONOMY.

FACT: LITTER DISCOURAGES
ECONOMIC DEVELOPMENT
BECAUSE IT IMPACTS REAL ESTATE
VALUES. GOOD STORES AND
IMPORTANT BUSINESSES WILL NOT
LOCATE IN A COMMUNITY, WHICH
LACKS THE PRIDE TO EFFECTIVELY
CONTROL LITTER.

MYTH: LITTERING CREATES JOBS.
FACT: LITTER COSTS MONEY.

LAST YEAR PENNSYLVANIA
TAXPAYERS PAID \$6 MILLION FOR
ROADSIDE CLEANUP.
PENNSYLVANIA DEPARTMENT OF
TRANSPORTATION (PENNDOT)
SPENT THIS AMOUNT TO CLEAN UP
ONLY THE WORST AREAS - ROADS
WITH HIGH LITTER ACCUMULATION.
THE MONEY COULD HAVE BEEN
USED TO CONSTRUCT ROADSIDE
RESTS OR TRAVELER
INFORMATION STOPS OR FOR
STATE ROAD, BRIDGE AND
POTHOLE REPAIR. **WITHOUT ITS
ADOPT-A-HIGHWAY AND KEEP
PENNSYLVANIA BEAUTIFUL
VOLUNTEERS, PENNDOT
ESTIMATES CLEAN UP WOULD
COST \$50 MILLION OR MORE
ANNUALLY.**

(SOURCE: [HTTP://WWW.LITTERBUG.ORG](http://www.litterbug.org))

THE CONSERVATION CLUB IS
PROUD TO BE A PART OF
PENNSYLVANIA'S ADOPT-A-
HIGHWAY PROGRAM. WE DO CARE
ABOUT THE ENVIRONMENT AND
CONSERVING NATURAL
RESOURCES. SO THE NEXT TIME
WE GO OUT FOR ADOPT-A-
HIGHWAY, PLEASE TAKE THE TIME
TO VOLUNTEER. REMEMBER, IT'S
EVERY ONE'S
RESPONSIBILITY AND IT'S
EVERYONE'S EARTH.

**WITHOUT ITS
ADOPT-A-
HIGHWAY AND
KEEP
PENNSYLVANIA
BEAUTIFUL
VOLUNTEERS,
PENNDOT
ESTIMATES CLEAN
UP WOULD COST
\$50 MILLION OR**

SMALL STEPS TO SAVE CHILE'S VALDIVIAN TEMPERATE FOREST

BY KATHLEEN HUTCHINSON '04

2003-04 ADOPT AN ACRE — CHILE'S VALDIVIAN TEMPERATE FOREST



IN RECOGNITION OF YOUR GENEROSITY AND SUPPORT OF EARTH'S LAST GREAT PLACES

CONSERVATION CLUB
FOR HELPING TO PROTECT 2 ACRES IN ONE OF NATURE'S LAST GREAT PLACES.



FROM SEPTEMBER 29TH TO OCTOBER 3RD 2003, THE CONSERVATION CLUB HELD AN ENDANGERED STUFFED ANIMAL RAFFLE TO RAISE MONEY TO ADOPT 2 ACRES OF VALDIVIAN TEMPERATE FOREST IN THE CHILEAN ANDES FOR THE NATURE CONSERVANCY.

FOR THEIR ADOPT AN ACRE PROGRAM, THE NATURE CONSERVANCY FOCUSES THEIR EFFORTS ON TWO ECOLOGICALLY SENSITIVE ECOSYSTEMS EACH YEAR. ONE OF THEIR PROGRAMS LAST YEAR WAS TO RAISE FUNDS FOR CHILE'S VALDIVIAN TEMPERATE FOREST IN THE HEART OF THE CHILEAN ANDES MOUNTAINS.

APPROXIMATELY 17% OF ALL PLANT SPECIES AND 18% OF ALL ANIMAL SPECIES IN CHILE CAN BE FOUND NOWHERE

ELSE ON EARTH.

BECAUSE AGRICULTURE, DEFORESTATION, WATER AND URBAN POLLUTION, COASTAL DEVELOPMENT, HIGHWAY CONSTRUCTION, AND OVER-FISHING HAVE DOUBLED BETWEEN 1984-1994, ABOUT 296,400 ACRES OF FOREST IS LOST EACH YEAR (WWW.NATURE.ORG/). WHEN WE LOSE THESE MAGNIFICENT FORESTS, WE LOSE PLANT AND ANIMAL BIODIVERSITY, LEAVING NOTHING FOR THE FUTURE. *WHEN SOMETHING GOES EXTINCT, IT IS GONE FOREVER.*

FROM OUR PLANT SALE, WE RAISED \$165.00. WE ADOPTED 2 ACRES OF CHILEAN FOREST, AND WE SENT THE REMAINING \$15.00 TO THE NATURE CONSERVANCY AS A GENERAL DONATION TOWARD THAT CAUSE.



*WHEN SOMETHING
GOES EXTINCT,
IT IS GONE
FOREVER.*



A YEAR OF COMMUNITY SERVICE

BY NICOLE SPERBECK '04



THIS YEAR THE CONSERVATION CLUB HAS BEEN EXTREMELY BUSY ORGANIZING SEVERAL FUNDRAISING EVENTS. AT THE BEGINNING OF THE SEMESTER, WE ORGANIZED A STUFFED ENDANGERED ANIMAL RAFFLE AND RAISED \$165 TO ADOPT TWO ACRES OF VALDIVIAN RAINFOREST IN CHILE.

LATER ON WE ORGANIZED ANOTHER STUFFED ANIMAL RAFFLE AND RAISED \$84.50 TO ADOPT 4 MENAGERIE ANIMALS, A SKUNK, A BOX TURTLE, A SAW WHET OWL, AND A HEDGEHOG, AT THE WILDLANDS CONSERVANCY IN EMMAUS.

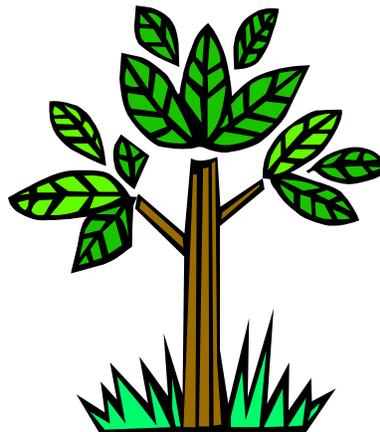


WE HELD OUR INFAMOUS PLANT SALE TWICE SO FAR THIS SEMESTER AND PLAN ON SELLING MORE PLANTS AT THE EARTH DAY CELEBRATION.

ON APRIL 4TH AND APRIL 11TH, MEMBERS OF THE CONSERVATION CLUB, AS WELL AS OTHER GROUPS, VENTURED OUT TO CLEAN HAMILTON BLVD. FOR OUR SPRING ADOPT-A-HIGHWAY PROGRAM. THE TRASH IS GONE AND THE ROAD LOOKS GREAT!

OTHER FUNDRAISERS WE HAVE ORGANIZED THIS SEMESTER WERE TO RAISE MONEY FOR OUR ACTIVE CLUB MEMBERS TO BUY EARTH DAY T-SHIRTS AND ADOPT-A-HIGHWAY SHIRTS.

ON APRIL 22ND AND APRIL 23RD, WE WILL BE CELEBRATING EARTH DAY WITH THE REST OF THE COLLEGE COMMUNITY. WE HOPE YOU WILL COME OUT AND JOIN US! THE SCIENCE PICNIC IS ALSO COMING UP ON MAY 7TH WHERE THE CONSERVATION CLUB WILL BE SPONSORING THE BAT-SPINNING EVENT.

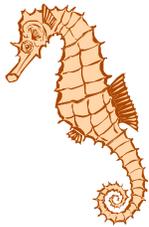




LOCAL EVENTS AND CAMPUS TRIPS



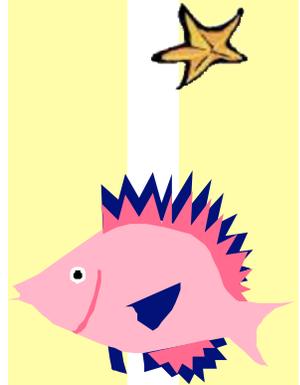
THE CONSERVATION CLUB SPONSORED A TRIP TO THE NEW JERSEY AQUARIUM ON NOVEMBER 23, 2003. A GREAT TIME WAS HAD BY ALL.



HEY DR. FAIVRE, DO YOU REMEMBER THIS ODD FLYING FISH?



"WAY-TOO-COOL SURFER DUDE TURTLE"
HEY NEMO, WHERE ARE YA DUDE?



FLYING FROG FISH???



NATIVE PLANT SALE AT THE WILDLANDS CONSERVANCY

BY KATHLEEN HUTCHINSON '04

NOW THAT THE DAYS ARE GETTING LONGER, WARMER, AND EVERYBODY HAS SPRING FEVER IT SEEMS, MAYBE IT'S TIME TO PLAN FOR YOUR GARDEN. IF YOU'RE THE OUTDOORS TYPE (AND HAVE LITTLE OR NO PLANT ALLERGIES), YOU COULD SPEND YOUR TIME PLANTING NATIVE AQUATICS, PERENNIALS, SHRUBS, TREES AND FLOWERS! THE ABSOLUTE BEST PLACE TO PURCHASE THESE WONDERFUL NATIVE GOODIES (AT A GREAT PRICE) IS AT THE POOL WILDLIFE SANCTUARY'S WILDLANDS CONSERVANCY IN EMMAUS, PA. OKAY, SO HERE'S THE "DIRT" (AS KATHY SAYS) ON THE PLANT SALE:

Time: 9:00 - 6:00 on all days

FRIDAY, MAY 14: *MEMBER'S DAY*, IF YOU BECOME A MEMBER YOU ARE ENTITLED TO A DISCOUNT. WE ARE SELLING PLANTS ALL DAY.

FROM 10:00 - 2:00 GARY CAMPBELL OF CAMPBELL'S NATURAL LANDSCAPING WILL BE ON STAFF TO ANSWER ANY GARDENING QUESTIONS.

SAT., MAY 15: THERE WILL BE A HEALTH FAIR GOING ON FROM 10:00 - 1:00. THIS WILL BE HOSTED BY LV HOSPITAL. THERE WILL BE DOCTORS AND NURSES ON STAFF DOING HEALTH SCREENINGS AND TALKING ABOUT GARDENING BENEFITS AND MISHAPS SUCH AS POISON, BITES ETC. WE ARE SELLING PLANTS ALL DAY.

FROM 9:00 - 11:00 REDS BAILY, A PROFESSIONAL LANDSCAPE CONTRACTOR FROM FERNROCK, WILL BE ON HAND TO ANSWER GARDENING QUESTIONS.

SUNDAY, MAY 16: WE ARE JUST SELLING PLANTS ALL DAY.

BESIDES OUR USUAL NATIVE PLANT SELECTIONS OF:
 AQUATICS
 PERENNIALS
 SHRUBS
 TREES
 GRASSES
 FERNS

WE WILL BE SELLING **LIMITED QUANTITIES** OF FOUR (4) DIFFERENT VARIETIES OF NATIVE SEEDS FOR \$3.00 EACH:

PHLOX PANICULATA - GARDEN PHLOX
ASCLEPIAS TUBEROSA - BUTTERFLY WEED
RUDBECKIA TRILOBA - BROWN-EYED SUSAN
VERNONIA NOVEBORACENSIS - IRONWEED

BOOKMARKS: \$3.00 EACH



LEHIGH VALLEY ECOLOGY AND EVOLUTION SOCIETY

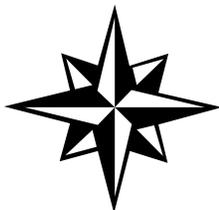
[HTTP://WWW2.CEDARCREST.EDU/ACADEMIC/BIO/JCIGLIANO/LVEES/LVEES.HTM](http://www2.cedarcrest.edu/academic/bio/jcigliano/lvees/lvees.htm)



CEDAR CREST COLLEGE HOSTED THE FIRST ANNUAL MEETING OF THE LEHIGH VALLEY ECOLOGY & EVOLUTION SOCIETY. AMONG THE PRESENTERS WERE UNDERGRADUATES FROM LEHIGH UNIVERSITY, CEDAR CREST COLLEGE, AND MUHLENBERG COLLEGE. THERE WERE AWARDS FOR BEST STUDENT ORAL AND POSTER PRESENTATIONS AND NICOLE SPERBECK, A SENIOR BIODIVERSITY & CONSERVATION BIOLOGY MAJOR, WON THE BEST ORAL PRESENTATION AWARD. CONGRATULATIONS TO NICOLE!!!!

WE WOULD ALSO LIKE TO CONGRATULATE THE OTHER CCC STUDENTS ON THEIR PRESENTATIONS. SEVERAL FACULTY FROM OTHER COLLEGES REMARKED ABOUT THE QUALITY OF THEIR RESEARCH AND THEIR PROFESSIONALISM. SO CONGRATULATIONS TO LORI KUNKLE, CORINNE CAMPBELL, GRETCHEN KOWALIK, KATHLEEN HUTCHINSON, CHERYL PARROTT, ASHLEY HENRY, CHERYL BERNAL, CRISTY BOTENS, REBECCA HILD, AND KIMBERLY MIEDE.

JOHN CIGLIANO
AMY FAIVRE





STUDENT RESEARCH

BLANDY EXPERIMENTAL FIELD STATION

BY CORINNE CAMPBELL '05

I SPENT THIS PAST SUMMER AS AN INTERN AT BLANDY EXPERIMENTAL FARM, A FIELD STATION OF THE UNIVERSITY OF VIRGINIA. LOCATED IN BOYCE, VIRGINIA, BLANDY IS A 712 ACRE FARM THAT HOUSES THE STATE ARBORETUM OF VIRGINIA AND IS USED BY STUDENTS, BOTH GRADUATE AND UNDERGRADUATE, AND SCIENTISTS FOR ECOLOGICAL RESEARCH.

AS PART OF BLANDY'S RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU) PROGRAM, MY PROJECT FOR THE SUMMER WAS WORKING WITH EASTERN PAINTED TURTLES. PAINTED TURTLES ARE MOSTLY AN AQUATIC SPECIES. FOR THE PAST COUPLE OF YEARS, VIRGINIA HAS SUFFERED IN DROUGHT CONDITIONS. IN THE YEAR 1998, NINE PONDS EXISTED ON BLANDY PROPERTY, BUT THEN IN '99 THROUGH '02, THREE AND THEN ONLY TWO PONDS REMAINED. THANKS TO ALL THE SNOW AND RAIN WE HAD THIS YEAR, ALL NINE PONDS EXIST AGAIN TODAY. I DID A STUDY OF THE TURTLES' MOVEMENT FROM THOSE PONDS THAT REMAINED THROUGH THE DROUGHT TO THOSE THAT ARE NEW THIS YEAR. I LOOKED AT THE AGE AND SEX SPECIFIC RATES OF MOVEMENT.

IN ADDITION TO COMPLETING MY OWN RESEARCH PROJECT, I ALSO HELPED VARIOUS OTHER UNDERGRADUATE AND GRADUATE STUDENTS, PROFESSORS AND VISITING SCIENTISTS WITH THE RESEARCH THEY WERE PERFORMING AT BLANDY FARM. THIS INCLUDED STUDIES IN NATIVE MEADOW RESTORATION ON BREEDING BIRD POPULATIONS THROUGH A MAPS (MONITORING AVIAN PRODUCTIVITY AND SURVIVAL) BANDING STATION, NESTING PREFERENCES OF LEAF CUTTING BEES, BUTTERFLY CENSUS, GEOGRAPHIC VARIATION IN MIMOSA TREES, SUCCESSIONAL STUDIES AND APHID POPULATION MONITORING ON MONKEYFLOWERS.

WORKING AT BLANDY FOR THE SUMMER GREATLY BROADENED MY HORIZONS. NOT ONLY DID I GAIN LOTS OF EXPERIENCE IN MY CHOSEN FIELD OF STUDY, BUT I ALSO GOT TO EXPLORE A NEW PART OF THE COUNTRY FOR ME. I ALSO GOT TO LIVE AND WORK WITH PEOPLE FROM ALL OVER THE US. IN TOTAL, THERE WERE 12 REU STUDENTS AND AN EQUAL NUMBER OF UNIVERSITY OF VIRGINIA GRAD STUDENTS AS WELL AS ONE FROM THE UNIVERSITY OF CALIFORNIA, DAVIS AND ONE FROM UNIVERSITY OF GEORGIA. AS PART OF THE REU PROGRAM, WE ATTENDED WEEKLY SEMINARS GIVEN BY GUEST LECTURERS (ONE OF WHICH HAPPENED TO BE DR. FAIVRE J), TOOK A TRIP TO THE SMITHSONIAN'S CONSERVATION RESEARCH CENTER IN FRONT ROYAL, VA AND HAD SOME CAREER NIGHTS WHICH ADDRESSED THE VARIOUS CAREER OPPORTUNITIES IN THE NATURE ORIENTED SCIENCES. ALL IN ALL, IT WAS A SUMMER OF FUN LEARNING.





THE FRIGGIN' CONCHS AND SOUTH CAICOS

BY GRETCHEN KOWALIK '05

ONCE AN EFFECTIVE METHOD IS DISCOVERED, THE TECHNIQUES WILL BE APPLIED IN THE FIELD WITH HOPES THAT THE DYED LARVAE WILL BE ABLE TO BE RECAPTURED AND THEIR DISPERSAL PATTERNS WILL BE EVIDENT.



THIS PAST JANUARY, EIGHT STUDENTS, DR. CIGLIANO, AND DR. CAMERON AND JOHN TRAVELED TO SOUTH CAICOS, WHICH IS PART OF THE TURKS AND CAICOS ISLANDS. WHILE THIS TRIP HAS AN APPEARANCE OF ESCAPING THE WINTER BLUES, IT ACTUALLY WAS A FIELD COURSE IN MARINE BIOLOGY. THE COURSE RAN FOR TWELVE DAYS AND EACH DAY WAS FILLED WITH TIME IN THE CLASSROOM, TIME IN THE WATER, AND EVEN SOME TIME IN THE KITCHEN!

WHILE ON SOUTH CAICOS, THE GROUP STAYED ON LOCATION AT THE SCHOOL FOR FIELD STUDIES. THE SCHOOL USED TO BE A HOTEL, SO THE CLASS HAD AN ADDED BENEFIT OF A SALTWATER POOL. JUST IN CASE WE DIDN'T GET TO SPEND ENOUGH TIME IN THE WATER DURING THE DAY! THE TYPICAL DAY CONSISTED OF AN EARLY MORNING WAKE UP CALL (COURTESY OF AN OLD SCUBA TANK) FOR BREAKFAST, FOLLOWED BY A LECTURE OR SNORKELING ON THE REEFS. MANY OF THE REEFS IN THE AREA HAVE NOT BEEN AFFECTED BY DISEASE OR DAMAGED BY HUMANS. THIS HAS LEFT THEM IN PRISTINE CONDITION AND THEY OFFER A GREAT VIEW INTO THE UNDERWATER WORLD. THE REEFS ARE ALSO IN GREAT SHAPE SINCE THERE IS NOT A HUGE IMPACT FROM TOURISM ON THE ISLAND. CURRENTLY THERE ARE THREE HOTELS UNDER CONSTRUCTION. THE TOURISM WOULD BENEFIT THE LOCAL COMMUNITY WHILE ALLOWING THE GUESTS TO VIEW BEAUTIFUL REEFS. ANOTHER REASON THE REEFS ARE IN SUCH GREAT SHAPE IS THE MANAGEMENT OF THEM THROUGH MARINE PROTECTED AREAS. THE SCHOOL WAS LOCATED BY THE EAST HARBOR LOBSTER AND CONCH RESERVE. MARINE PROTECTED AREAS ARE SET UP SO THE SPECIES LOCATED WITHIN ARE GIVEN A CHANCE TO REPLENISH THEMSELVES SINCE TAKING FISH FROM THE AREA IS ILLEGAL. THE GOAL OF THE MPA'S IN TCI IS TO PROTECT THE QUEEN CONCH, NASSAU GROUPER, AND THE

SPINY LOBSTER.

ALL OF THE SPECIES ARE ENDANGERED AS A RESULT OF OVERFISHING. PART OF THE RESEARCH CONDUCTED WHILE IN THE TURKS AND CAICOS ASKED IF THE MPAS WERE EFFECTIVE IN PROTECTING SPECIES. THE STUDENTS SAMPLED REEFS BOTH INSIDE AND OUTSIDE OF THE RESERVE TO DETERMINE IF FISHING HAS AN IMPACT ON THE REEF HEALTH. THE OTHER RESEARCH PROJECT CONDUCTED WHILE ON THE TRIP PERTAINED TO QUEEN CONCH CATCH REGULATIONS. THE PURPOSE WAS TO DISCOVER IF THE CURRENT REGULATIONS SET BY TCI ARE EFFECTIVE IN MAINTAINING LEVELS OF QUEEN CONCH. OF COURSE THERE WAS TIME FOR SOME FUN. THE CLASS HAD THE CHANCE TO TAKE A FIELD TRIP TO A CONCH AND LOBSTER PROCESSING PLANT, THERE WAS A TOUR OF THE ISLAND, AND WE EVEN ENJOYED THE LOCAL CUISINE ON ONE NIGHT! AND WHO COULD FORGET WHAT HAPPENS AFTER ONE RAINY MORNING...YOU GET A PERFORMANCE BY THE FRIGGIN CONCH TRAVELING TROUPE!

ALIZARIN, OTC AND CALCEIN. OH MY!

MARINE PROTECTED AREAS HAVE TWO GOALS, TO PROTECT SPECIES THAT ARE THREATENED AND REPLENISH SURROUNDING AREAS. THE QUESTION ON MARINE SCIENTISTS MINDS IS HOW EFFECTIVE ARE MARINE PARKS. IS SPECIES ABUNDANCE INCREASING AND ARE LARVAE FROM THE PARK POPULATING AREAS OUTSIDE THE RESERVE OR ARE THEY REPOPULATING THE AREA WITHIN THE RESERVE. CURRENTLY I AM WORKING ON FINDING AN EFFECTIVE METHOD OF DETERMINING LARVAE DISPERSAL PATTERNS OF QUEEN CONCH. I AM WORKING WITH



STROMBUS ALATUS, WHICH IS A SPECIES OF CONCH THAT IS SIMILAR IN SIZE AND DEVELOPMENT TO THE QUEEN CONCH. QUEEN CONCH ARE CURRENTLY A THREATENED SPECIES AND MARINE PARKS MAY BE A POSSIBLE WAY OF SAVING THEM. *S. ALATUS* ARE IMMERSED IN THREE FLUORESCENT DYES (ALIZARIN, OTC, AND CALCEIN) AT VARYING CONCENTRATIONS AND TIME PERIODS. THE HOPE IS THAT THE DYES WILL BE INCORPORATED INTO

THE CONCH SHELLS AS THEY DEVELOP BEFORE HATCHING. THE VELIGERS WILL BE VIEWED UNDER A FLUORESCENT MICROSCOPE TO DETERMINE IF THE DYE WAS INCORPORATED INTO THEIR SHELLS. WE ARE TRYING TO DETERMINE WHICH DYE PRODUCES THE GREATEST FLUORESCENCE IN THE SHORTEST TIME IMMERSION POSSIBLE WITH THE LEAST MORTALITY TO THE SPECIES.

TRAVEL TO KENYA BY CHERYL PARROT '04



LAST SEMESTER SPRING 2003 I HAD THE OPPORTUNITY TO TRAVEL TO KENYA AFRICA WITH THE SCHOOL FOR FIELD STUDIES PROGRAM. I STAYED AT THE CENTER FOR WILDLIFE MANAGEMENT AND ATTENDED CLASSES AS WELL AS CONDUCTING RESEARCH IN THE PARKS AND GROUP RANCHES. THE PROGRAM OFFERED ME THE CHANCE TO INTERACT WITH THE LOCAL MAASAI, LEARNING ABOUT THE CULTURE AND THE LAND. THROUGH THE PROGRAM WE INTERVIEWED LOCAL PEOPLE WITH THE HELP OF A TRANSLATOR, TO GAIN INSIGHT INTO HOW THE LOCAL PEOPLE VIEWED THE WILDLIFE AND THE PARK SYSTEMS AS WELL AS OTHER ISSUES. WE ALSO CONDUCTED GRASS AND BIRD SURVEYS AS WELL AS LARGE MAMMAL GAME COUNTS. I SPENT MOST OF MY TIME IN THE PARKS AND GROUP RANCHES OBSERVING ANIMALS IN THEIR NATURAL HABITAT AND ASSESSING THE RISKS TO PEOPLE, LIVESTOCK, AND WILDLIFE. CLASSES WERE HELD ON TOP OF MOUNTAINS AND ON THE SIDE OF THE ROAD, WHEREVER A GOOD SUBJECT CAME ALONG. WE HIKE VOLCANOS AND PLAYED SOCCER WITH KENYANS. IT WAS AN EXPERIENCE OF A LIFETIME. I MADE AMAZING FRIENDS AND EXPERIENCED THINGS I NEVER THOUGHT THAT I WOULD. THERE IS NOTHING LIKE GOING TO BED AND HEARING LIONS AND HYENAS CALLING, HAVING YOUR LUNCH STOLEN BY A BABOON (THAT CHASED YOU IN ORDER TO GET IT), OR HAVING TO CHASE ELEPHANTS OUT OF YOUR CAMPSITE BEFORE YOU CAN PITCH YOUR TENT.

HISTORY MAJORS AS WELL AS ANTHROPOLOGY MAJORS AND A FEW SCIENCE MAJORS SCATTERED IN THERE. SPENDING TIME INTERACTING WITH MY FELLOW STUDENTS AS WELL AS THE LOCAL PEOPLE AND STAFF MADE ME A MORE WELL ROUNDED PERSON THEN ANY COLLEGE EXPERIENCE EVER COULD HAVE. I LEARNED A NEW WAY OF LIFE AND WAS ABLE TO APPLY WHAT I HAD LEARNED HERE AT CEDAR CREST COLLEGE TO HELP OTHER PEOPLE, ITS AN AMAZING FEELING WHEN PEOPLE FROM THE GROUP RANCH COME TO SEE YOU PRESENT YOUR RESEARCH. YOU HAVE TO APPLY WHAT YOU HAVE LEARNED NOT ONLY IN THE NUMBERS YOU HAVE COLLECTED BUT ALSO TO LOOK AT WHAT SUGGESTIONS YOU CAN MAKE TO THE LOCAL PEOPLE TO HELP THEM SUSTAIN THEIR RESOURCES FOR FUTURE GENERATIONS, WHILE MAINTAINING THEIR CULTURE. IT'S A SO GRATIFYING TO KNOW THAT THEY WANT TO KNOW WHAT YOU THINK AND THEY VALUES YOUR OPINION ON HOW THEY SHOULD WORK TO IMPROVE THEIR WAY OF LIFE SO THAT THEY WILL HAVE RESOURCES FOR THE FUTURE.



THE DIVERSITY OF PEOPLE ON THE TRIP MADE THE LEARNING EXPERIENCE THAT MUCH MORE ENJOYABLE, THERE WHERE PHOTO JOURNALISM MAJORS, ART AND



IGUANA FACTS

So you think Iguana's are an "easy" pet? BY AMANDA HESS '08

When most people come into the Biodiversity and Conservation Biology Lab in Science Center 106, the first thing they see is Zeus. Zeus is a Green Iguana, somewhat small for an iguana of his estimated age of 4 years, approximate size from snout to tail is 35-48 inches long, and about 5-8 pounds for an average iguana, and Zeus is about 28 inches long and weighs about 4 pounds. I know what your thinking, we don't treat him right, but we do. Zeus's diet consists of three veggies, a staple green (such as collards or dandelions), a fruit, alfalfa, antacids, vitamins and minerals, a treat a few times a week. Zeus has free run of the BCB lab many times a week, and loves to get into trouble.

But enough about Zeus lets learn about Iguanas in general. Iguanas are herbivores, period, that's it, no discussion. If iguanas are fed meat they can and probably will die a slow painful death of not being able to digest the protein. So if you ever hear of someone telling you they feed their Iguana cat food, dog food, crickets, or any other food for or made of animals Yell at them, and tell them to change! And if they don't listen report them to your humane society for animal cruelty. Iguanas are cools pets, if treated right.

Habitats are another thing. Some people think that an Iguana will only grow as big as his cage. Ha... no. Iguanas grow to be big, even if they are in a ten-gallon tank. Iguanas live alone too; you will usually see iguanas together in nature, but not in captivity. If you want more than one iguana, you need more than one habitat, and habitats are expensive. In every habitat you need to have branches to climb on, and lots of them. Also, iguanas like to swim, or sit in water, so they need a tub big enough for them to fit their body and some of their tail in, and it needs to be changed every day because iguana's like to poo in their water. Iguanas also shed their sink every once in a while, and the water helps to get ride of the stuck on flakes, so water is essential. The habitat also needs to have a UVA and UVB light, along with a heat lamp; Iguanas are cold-blooded animals and stay warm by basking in sunlight. If you still don't know what your habitat should look like, go visit Zeus. He has a perfect size habitat for one iguana.

So, your still thinking about getting an iguana, well most iguanas only appreciate you because you feed them, and change their water. If you adopt an iguana that is more than a few months old, they most likely won't be too friendly, and iguanas have very sharp teeth, and a really powerful tail. Having an iguana bite through your finger nail isn't exactly what most people consider fun. So try to get a young iguana if you want it to be your best friend.

These are just a few reasons why iguana's are cool animals, but not necessarily cool pets. Just one more reason before you make up your mind if your still thinking of getting a pet iguana, although they are about \$15 in most pet stores, a proper habitat will cost you at least \$150, food \$100+ a year, light bulbs are about \$75 a year (UVA and UVB lamps need to be changed every 6 months, and are about \$25-\$40 per bulb, and then regular heat bulbs), and then you should have your Iguana checked out once a year by a Reptile Veterinarian (which are hard to find, so you might have to travel a little ways to find one). So that \$15 Iguana has just cost you easily \$325 for the first year, and another \$200 a year every year after that.

Just remember, all animals, not just Iguana's, are wild at heart. So please take caution with any animal that you see, touch, pet, and keep.



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