# CONSERVATION CONVERSATIONS

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@CEDAR CREST
COLLEGE





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ROAD."

### CONSERVATION CLUB NEWS

#### The Conservation Club Adopts Part of Hamilton Blvd.

By KATHLEEN HUTCHINSON '04

IN THE SPRING OF 2003, THE CONSERVATION CLUB AT CEDAR CREST COLLEGE ADOPTED A 1.5 MILE STRETCH OF HIGHWAY (HAMILTON STREET), FROM LINCOLN STREET TO OTT STREET AS PART OF THE PENNSYLVANIA ADOPT-A-HIGHWAY PROGRAM. THE INITIAL HIGHWAY CLEAN UP WAS PRETTY INTENSIVE, ESPECIALLY WHEN WE CLEANED UP THE HIGHWAY IN DRIZZLE, POURING RAIN, AND COLD DAMP CONDITIONS. I GUESS THE GREATEST REWARD IS KNOWING THAT WE'VE CONTRIBUTED TO A CLEANER ENVIRONMENT AND SAFER TRAVELING CONDITIONS, EVEN IF IT IS ONLY ALONG A 1.5 MILE STRETCH OF ROAD.

IN ADDITION TO SHOTGUN SHELLS, FIREWORKS, AND DEAD ANIMALS, WE FOUND A LOT OF OTHER ITEMS SUCH AS CLOTHING, TIRES, CAR PARTS (MECHANICAL AND FROM ACCIDENTS), SIGNS, RECYCLABLES, UNMENTIONABLES, AND TOYS (WE KEPT A GOOD SOCCER BALL), TO MENTION A FEW. SOME OF THE ITEMS WE FOUND WERE VERY DANGEROUS TO HIGHWAY TRAFFIC, LET ALONE HUMAN LIFE. IT'S NICE TO KNOW THEY ARE NO LONGER THERE, OR AT LEAST NOT AS ABUNDANT AS THEY WERE.

I WOULD LIKE TO PERSONALLY THANK ALL THE CLUB MEMBERS AND NON-MEMBERS WHO CONTRIBUTED TO THIS WORTHY AND NOTABLE CAUSE: ELIZABETH BAUER, CORINNE CAMPBELL, DR. JOHN CIGLIANO, VALERIE CIRAULO, HEATHER DEVOID, DR. AMY FAIVRE, AMANDA HESS, KATHLEEN HUTCHINSON, GRETCHEN KOWALIK, GINA MALLORY, CHANTELL METELKO, HEIDI NICK, JULIANNE SEFKO, NICOLE SPERBECK, NANI WATIMAR, AND VERONICA YERMAL. THANK YOU ALL FOR A JOB WELL DONE! I HOPE TO SEE YOU BACK IN THE SPRING.



BETSY, KATHLEEN & GINA TAKE A BREAK DURING AN ADOPT-A-HIGHWAY CLEANUP. NOTICE THE SIGN!!

### Earth Day 2003

By NICOLE SPERBECK '04 & KATHLEEN HUTCHINSON '04

ON 22 APRIL 2003, CEDAR CREST COLLEGE HELD ITS EARTH DAY CELEBRATION, WHICH WAS SPONSORED BY THE CONSERVATION CLUB AND THE ARTS SOCIETY. THE PRETERITE AND THE BIOLOGY CLUB WERE ALSO INVOLVED.

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IN ADDITION TO HAVING FUN, THE PURPOSE OF THE CONSERVATION CLUB'S INVOLVEMENT IN THE

EARTH DAY CELEBRATION WAS TO PROMOTE AWARENESS OF ENVIRONMENTAL AND CONSERVATION ISSUES FACING SOCIETY TODAY. PRIOR TO THE ACTUAL EARTH DAY ACTIVITIES, THE CONSERVATION CLUB DESIGNED AND SOLD THE FIRST EVER CEDAR CREST COLLEGE EARTH DAY T-SHIRT. THE QUOTE SURROUNDING THE EARTH ON THE

CONTINUED ON NEXT PAGE





BACK OF THE T-SHIRTS SAID IT ALL: "WHAT DOES IT MEAN TO YOU?"

CHILDREN FROM THE SURROUNDING COMMUNITY ATTENDED THE CELEBRATION, AND AS A TOKEN OF OUR APPRECIATION, THEY WERE GIVEN EARTH DAY T-SHIRTS. THERE WAS ALSO A TABLE SET UP FOR ANYONE WHO WAS INTERESTED IN "TIE-DYING" THEIR T-SHIRTS. IT WAS MESSY, BUT A LOT OF FUN! OTHER **EVENTS THE CONSERVATION CLUB** SPONSORED INCLUDED: FACE PAINTING, A RENDITION OF THE LORAX IN THE GREEK THEATER, AND "TAKE YOUR PICTURE AS AN ENDANGERED ANIMAL." WE ALSO GAVE THE CHILDREN AN ARRAY OF WILD AND CRAZY PLASTIC INSECTS, DINOSAURS, AND EXOTIC ANIMALS.

THE BIOLOGY CLUB SPONSORED A TABLE IN WHICH THE CHILDREN COULD PLANT SEEDS IN BIODEGRADABLE POTS. THE PRETERITE CLUB READ STORIES ON ENVIRONMENTAL ISSUES TO THE CHILDREN AND ALSO SPONSORED A NATURE POETRY READING FOR CEDAR CREST STUDENTS. AND THE ART SOCIETY SPONSORED A PAPER-MAKING STATION IN WHICH PEOPLE COULD MAKE PAPER OUT OF RECYCLED MATERIALS.

A REPRESENTATIVE FROM THE WILDLANDS CONSERVANCY'S POOLE WILDLIFE SANCTUARY WAS ALSO ON HAND AND PRESENTED SOME OF THE ANIMALS THE CONSERVANCY HAD RESCUED AND CONTINUES TO MAINTAIN IN THEIR MENAGERIE. SOME OF THE ANIMALS PRESENT AT EARTH DAY INCLUDED AN OWL, A SNAKE, AND A HEDGEHOG.

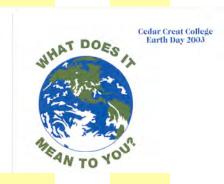
A PETITION TABLE WAS AVAILABLE FOR ANYONE WHO WAS INTERESTED IN TAKING ACTION AGAINST CURRENT ENVIRONMENTAL ISSUES. ONE SUCH PETITION URGED PEOPLE TO TELL THE BUSH ADMINISTRATION NOT TO WEAKEN THE CLEAN AIR ACT. APPROXIMATELY 25 PEOPLE SIGNED THE PETITION AND MADE A DIFFERENCE!

THE CONSERVATION CLUB INVITED A PANEL OF SPEAKERS TO AN ENVIRONMENTAL FORUM TO TALK ABOUT THEIR INTERESTS IN CONSERVATION ISSUES AND WHAT THEY WERE DOING TO CONTRIBUTE TO THE COMMUNITY. KATHERINE McCarter, a Cedar Crest ALUMNA'64, ANTHONY RODALE, FROM THE RODALE INSTITUTE, DR. KEITH BILDSTEIN FROM HAWK MOUNTAIN SANCTUARY, DR. DAVID SMITH, FROM THE DISCOVERY CENTER, HEATHER COOK'02, AND NICOLE SPERBECK, A CEDAR CREST STUDENT, WERE AMONG THE SPEAKERS ON THE PANEL.

FOR THE NEXT EARTH DAY
CELEBRATION IN THE SPRING OF
2004, THE CONSERVATION CLUB
HOPES TO EXPAND ON IDEAS FROM
LAST YEAR. WE ARE PLANNING ON
HAVING A NEW DESIGN FOR THE
EARTH DAY T-SHIRTS, AND WE
HOPE TO HAVE MORE INFORMATION
TO DISSEMINATE TO THE PUBLIC
REGARDING EDUCATION AND WHAT
SOCIETY CAN DO TO CONTRIBUTE
TO A BETTER EARTH. AND WE HOPE
FOR EVEN MORE INVOLVEMENT
FROM THE ENTIRE CEDAR CREST
COMMUNITY.







EARTH DAY T-SHIRT LOGO



DR. CIGLIANO'S
DAUGHTERS, MARISA &
OLIVIA, POSING AS THEIR
FAVORITE ENDANGERED
ANIMAL.

# STUDENT RESEARCH IN BIODIVERSITY & CONSERVATION BIOLOGY

### **Research in Prince William Sound, Alaska**

BY: NICOLE SPERBECK '04

LEAVING WHITTIER, ALASKA FOR THE FIRST TIME SINCE LAST FALL. WE HEAD EAST THROUGH THE PASSAGE CANAL. THE BEGINNING OF MAY IS STILL A LITTLE EARLY FOR THE **BOATING SEASON TO OFFICIALLY** BEGIN, BUT WE GET A HEAD START BEFORE OTHER BOATERS CROWD THE WATERS. IT'S JUST US AND PRINCE WILLIAM SOUND. AS WE SIT ON THE BRIDGE, WITH A STRONG WIND IN OUR FACES AND A BRIGHT SUN IN OUR EYES, WE LOOK OUT AT THE HANGING GLACIERS ON THE MOUNTAINS THAT BOARDER THE NARROW PASSAGE IN WHICH WE ARE TRAVELING. THE SMELL OF SALT WATER REFRESHES OUR SENSES AND THE BRIGHT SUN REJUVENATES OUR SPIRITS.

IT IS HARD TO BELIEVE THAT FOURTEEN YEARS AGO AN ENORMOUS OIL TANKER, EXXON VALDEZ, RAN AGROUND AND SPILLED ELEVEN MILLION GALLONS OF ALASKAN NORTH SLOPE CRUDE OIL INTO THIS MAGNIFICENT PLACE. THIS GUMMY SUBSTANCE SATURATED APPROXIMATELY 1,200 MILES OF SHORELINE (THAT IS EQUIVALENT TO THE DISTANCE BETWEEN CAPE COD, MA AND THE OUTER BANKS, NC), KILLING ALMOST EVERYTHING IN ITS PATH. THE HARDEST HIT AREAS WERE THE INTERTIDAL ZONES, AND THIS IS WHERE I HAVE FOCUSED MY RESEARCH.

THE PURPOSE OF MY RESEARCH IS TO REASSESS THE DAMAGE THAT THE OIL CAUSED TO THE INTERTIDAL ZONES OF THREE DIFFERENT HABITAT-TYPES AND DETERMINE IF THESE HABITATS HAVE RECOVERED. WITH THE HELP OF DR. CIGLIANO, I CAME UP WITH A RESEARCH DESIGN DURING THE SPRING SEMESTER OF 2003, I COMPILED TEST DATA AND ANALYZED IT, AND I RESEARCHED PREVIOUS STUDIES ON SIMILAR TOPICS. THIS

ALL PREPARED ME FOR WHAT WAS TO COME.

ONCE I MADE IT BACK TO ALASKA, I HAD A LOT OF WORK TO DO. FIRST AND FOREMOST, WAS TRACKING DOWN A HULA-HOOP, SINCE THIS WOULD BE USED AS MY QUADRAT (QUADRATS ARE A VERY IMPORTANT PART OF SAMPLING AND A HULA-HOOP WAS PERFECT FOR THE JOB!) I THEN HAD TO FIGURE OUT EXACTLY WHERE I WOULD BE GOING, SO I DID A LITTLE MORE RESEARCH AND FOUND A GREAT MAP THAT DETAILED ALL THE ISLANDS THAT WERE HIT WITH OIL AND WHAT THEIR HABITAT- TYPES WERE. ONCE THIS WAS COMPLETE, IT WAS TIME TO GET BUSY.

THROUGHOUT THE COURSE OF THE SUMMER, I TOOK SAMPLES EIGHT DIFFERENT TIMES. TRANSECTS, WHICH RAN FROM THE UPPER INTERTIDAL TO THE LOWER INTERTIDAL, WERE SET UP ON EACH ISLAND; EACH TRANSECT WAS DIVIDED INTO THREE SECTIONS (THE UPPER, MIDDLE AND LOWER INTERTIDAL ZONES), AND WITHIN EACH SECTION, THREE QUADRATS WERE SAMPLED. THIS MEANS NINE QUADRATS PER TRANSECT.

WITH THE HELP OF MY PARENTS AND BROTHER, I ENDED UP WITH A LOT OF GREAT DATA. WE FOUND CRITTERS THAT I NEVER KNEW EXISTED IN ALASKA, SOME OF WHICH INCLUDE CHITONS, LIMPETS, HERMIT CRABS, AND MORE. IT WAS AMAZING TO SEE THAT PRINCE WILLIAM SOUND SUPPORTED SO MUCH BIODIVERSITY! IN THE NEXT FEW MONTHS, I

WILL BE ANALYZING MY DATA TO
DETERMINE THE EXTENT OF RECOVERY
OF THESE INTERTIDAL ZONES. I HOPE
TO FIND THAT EACH ECOSYSTEM IS
BACK TO ITS PRE-SPILL HEALTH.



ELEANOR
ISLAND — ONE
OF NICOLE'S
STUDY SITES







CAN ANYONE
IDENTIFY THIS
CRITTER? IF YOU
CAN, LET NICOLE
KNOW!











HALYOMORPHA HALYS

THE BROWN
MARMORATED
STINKBUG

"Every week, I spent 3-6 hours hunting down this little creature in 12 of the 13 groves out at the farm."



# Summer Senior Research at the Rodale Experimental Tree Farm in Emmaus, Pa

BY KATHLEEN HUTCHINSON '04

I SPENT THIS PAST SUMMER, MY LAST, OUT AT THE RODALE EXPERIMENTAL TREE FARM, CENTER FOR ORGANIC FARMING AT EMMAUS, PA. MY ULTIMATE GOAL THIS PAST SUMMER WAS TO USE GEOGRAPHIC INFORMATION SYSTEMS (GIS), AND THE GLOBAL POSITIONING SYSTEM (GPS), TO IDENTIFY WHAT VEGETATION OUR FAMOUS LITTLE STINKBUG WAS USING FOR ITS HOST PLANTS.

EVERY WEEK, I SPENT 3-6
HOURS HUNTING DOWN THIS
LITTLE CREATURE IN 12 OF
THE 13 GROVES OUT AT THE
FARM. THE TREES PLANTED
IN EACH GROVE ALL SERVED
A DIFFERENT PURPOSE.
FROM NITROGEN FIXATION
TO THE PREVENTION OF
EROSION, EACH GROVE WAS
THOUGHTFULLY PLANNED
AND PLANTED.

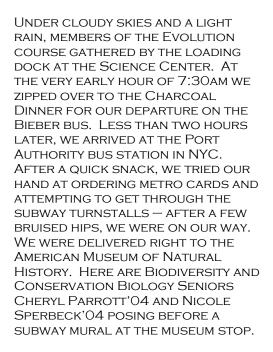
IN ORDER TO GENERATE A HOST PLANT LIST, THE WOMAN WHO PLANTED THE MAJORITY OF THE GROVES, MARYANN TRETTER, ESCORTED ME THROUGH
EACH GROVE AND HELPED ME
IDENTIFY EACH AND EVERY
TREE ON THE FARM. I LATER
TOOK GPS WAYPOINTS
EVERY TIME I SPOTTED ONE
OF OUR STINKBUGS,
HALYOMORPA HALYS,
DURING ANY OF ITS INSTARS,
OR DEVELOPMENTAL
STAGES. FROM THE LIST OF
PLANTS I GPSED AND THE
SIGHTINGS I GPSED, I CAN
ADD TO THE KNOWN HOST
PLANT RECORD.

FOR DETAILS AND RESULTS, PLEASE KEEP A LOOK OUT FOR MY SENIOR RESEARCH PRESENTATION IN THE SPRING. ALSO, IF ANYONE HAS ANY QUESTIONS REGARDING STINKBUGS IN GENERAL, YOU MAY CONTACT DR. JOHN CIGLIANO (SC 1 1 2), GINA MALLORY OR MYSELF (VIA EMAIL IF YOU DON'T KNOW US), AND WE WILL BE HAPPY TO ANSWER ANY OF YOUR CONCERNS OR QUESTIONS. HAPPY STINKBUG HUNTING, AND KEEP AN EYE TO THE SKY!



# Evolution Class Visits American Natural History Museum in New York City

BY DR. AMY FAIVRE



ONCE INSIDE THE MUSEUM, WE TOOK A COURSE PHOTO IN THE MAIN LOBBY, SURROUNDED BY A LARGE BRONTOSAURUS RECONSTRUCTION. QUITE IMPRESSIVE! ON THE FOURTH FLOOR WE FOUND AN EXTRAORDINARY **EXHIBIT SHOWING VERTEBRATES AND** THEIR EXTINCT ANCESTORS, DINOSAURS, AND THE EARLIEST MAMMALS. THE CLASS WAS GIVEN A SET OF QUESTIONS BY DR. FAIVRE -WHOEVER GAVE THE MOST CORRECT ANSWERS WON A GIFT CERTIFICATE TO THE MUSEUM GIFT SHOP. PRIZES WERE WON BY BIODIVERSITY AND CONSERVATION BIOLOGY MAJOR GRETCHEN KOWALIK'05 AND BIOLOGY MAJOR KATIE PARADISE'04, FOR THEIR EXCELLENT ANSWERS. RUNNERS-UP INCLUDED BIOLOGY MAJOR AMBER ZEHNER'04 AND CHERYL PARROTT'04. AFTER BEING SURROUNDED BY SUCH EXOTIC COELACANTHS, GIANT SLOTHS, AND PTEROSAURS, WE WERE READY FOR LUNCH!

AFTER LUNCH WE WALKED OVER TO MAXILLA AND MANDIBLE, AN ECLECTIC STORE WITH ANIMAL SKELETONS, BIOLOGY POSTERS, AND SEVERAL BRONZE STATUES BY CEDAR CREST COLLEGE ART PROFESSOR NELSON MANISCALCO. FROM THERE IT WAS A SHORT WALK TO ZABAR'S, AN IMPORTANT GOURMET FOOD MUSEUM. WE SPENT OUR LAST AFTERNOON MOMENTS IN TIMES SQUARE WHERE BIOLOGY MAJOR LINDSAY SCHWAB'04 INTRODUCED US TO THE GIANT THREE-STORY TOYS R'US AND NICOLE SPERBECK'04 ENCOURAGED US TO SAMPLE SOME ROASTED COCONUT HUSKS. BACK AT PORT AUTHORITY WE MET UP WITH GENETIC ENGINEERING MAJOR MELISSA CZOCK'04 AND HER DAD. WHO HAD MANAGED TO SQUEEZE IN A VISIT TO THE METROPOLITAN MUSEUM OF ART ALONG WITH THEIR TRIP TO THE AMERICAN MUSEUM OF NATURAL HISTORY. IT WAS A LIVELY DAY HAD BY ALL!



NICOLE & CHERYL AT THE AMNH





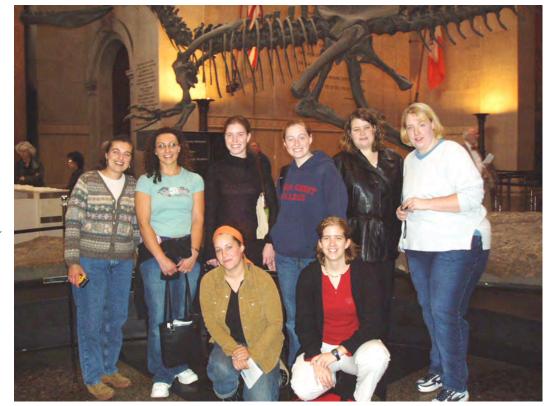
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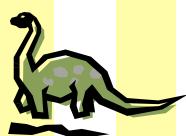




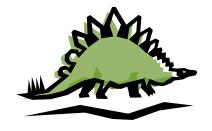


### **Evolution Class at AMNH**





DR. FAIVRE AND THE EVOLUTION CLASS AT THE AMERICAN MUSEUM OF NATURAL HISTORY. PICTURED ARE (FROM LEFT TO RIGHT) ARE: (STANDING) DR. FAIVRE, NICOLE SPERBECK '04, CHERYL PARROT '04, AMBER ZEHNER '04, LINDSAY SCHWAB '04, MELISSA CZOCK '04, (KNEELING) KATIE PARADISE '04, AND GRETCHEN KOWALIK '05.







"EVERY DAY IS EARTH

DAY."

### LOCAL CONSERVATION & ENVIRONMENTAL NEWS

## **Native Plant Sale at the Pool Wildlife Sanctuary in Emmaus. Pa**

BY KATHLEEN HUTCHINSON

TWICE A YEAR THE WILDLANDS CONSERVANCY IN EMMAUS, PA (A.K.A. POOL WILDLIFE SANTUARY), A NON-PROFIT ORGANIZATION, HOLDS A **NATIVE PLANT** SALE PROMOTING, WHAT ELSE, **NATIVE PLANTS**. THE FALL SALE TOOK PLACE ON FRIDAY AND SATURDAY, OCTOBER 5<sup>TH</sup> AND 6<sup>TH</sup> RESPECTFULLY.

THEY FEATURED A VARIETY OF BEAUTIFUL NATIVE SHRUBS, TREES, WILDFLOWERS, FERNS, GRASSES, AND AQUATIC PLANTS. I SPENT FROM JULY 12<sup>TH</sup> TO OCTOBER 4<sup>TH</sup> WATERING, MULCHING, EDGING, WEEDING, REARRANGING, AND SETTING UP FOR THE BIG EVENT. I WAS AMAZED AT THE VARIETY OF BEAUTIFUL NATIVE PLANTS WE HAVE RIGHT UNDER OUR NOSES! BY THE SAME TOKEN, IT BOTHERS ME THAT WE HUMANS INTENTIONALLY INTRODUCE SO MANY INVASIVE SPECIES INTO OUR ENVIRONMENT- AN **ENVIRONMENT THAT IS ALREADY** OVERFLOWING WITH TOO MANY.

THERE WILL BE A HUGE SPRING **NATIVE PLANT** SALE AT THE CONSERVANCY AS WELL. NO DOUBT I'LL BE BUSY IN THE NURSERY AGAIN, DRENCHING WET, MUDDY, AND WITH BUG GUARD IN HAND. I'VE ALREADY BEGUN WORKING ON MAKING THE PLACARDS FOR EACH SPECIES OF PLANT/TREE, ETC. PLEASE GET THE WORD OUT ABOUT THE PLANT SALE. IF YOU GET SOME TIME IN THE SPRING, STOP BY THE CONSERVANCY AND SEE FOR YOURSELF HOW MANY ATTRACTIVE **NATIVE PLANTS THERE REALLY ARE.** YOU CAN MAKE A DIFFERENCE BY PURCHASING A LOW COST TREE, SHRUB, OR PERENNIAL AND BY DOING

CONSERVING NATIVE PLANT

SO, YOU WILL BE CONTRIBUTING TO BIODIVERSITY. HAPPY PLANTING!



KATHLEEN HUTCHINSON '04 WORKING AT THE NATIVE PLANT SALE. PHOTOGRAPH BY FRANK WIESE OF THE MORNING CALL



"ACT LOCALLY, THINK **GLOBALLY!**"



#### CEDAR CREST COLLEGE

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