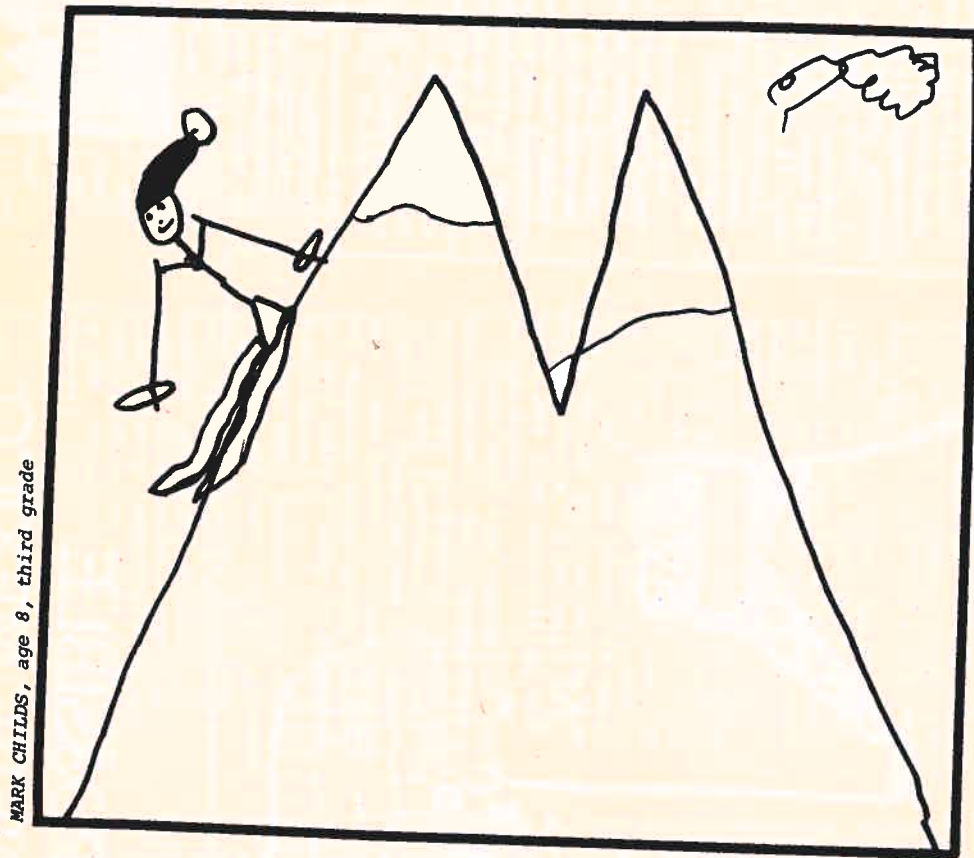


the Rio Grande
SIERRAN

1978

Jan/Feb



MARK CHILDS, age 8, third grade

december

last year's brown/purple hue
of leaf-lost haze of apple tree, magpies
gold and grey grasses
entangled but kept
fermented and unpicked
apples swollen and wrinkled
with ways of fate
sweet fertile and entangled
but kept.

and now
forever stepping the lichened
basalt patches bare snow and
cold hurts to feel good
and strong knees from
hills and climbs and
night jumps from ogre rocks:

six coyotes in scrub oak
snow through young
ponderosas play cavort
bite and chase their powdered
deep coats unaware.

there is nothing to take your hand here.
there is nothing to hold on to.
to keep. it is wild.

BY: LUTHER ALLEN, TESUQUE, NM

Environmental Toxins & Your Health

BY: NINA ROBBERN

A practical guide to increasing health through the avoidance of environmental pollutants is an eight week course called Environmental Toxins and Your Health. Offered January to March by Continuing Education of College of Santa Fe, the course will focus on the presence of pesticides in our air, food, and personal effects.

With the increase in what chemical industry refers to as "non-pesticide uses" of pesticides, there is more to worry about than the air we breathe or whether we are eating organically produced foods. Hundreds of non-food items which are part of our daily existence are also permeated with pesticides. These chemicals - employed by industry in the manufacture of such items as clothing textiles, paper, shampoos and soaps, building materials, and electronic devices to name a few - are highly toxic to mammals and take their toll of human health.

How they affect our health and how to recognize a "pesticide reaction" has been the concern of a national group of physicians with which the instructor has been working. One of their project aims is to determine levels of human sensitivity to pesticides which are residually present in the general and personal environment. By eliminating, as much as possible, exposures to pesticides, these doctors - whose specialties range from pediatrics to psychiatry - have cured once hopeless cases of a wide range of ailments; from hypoglycemia and arthritis to psychiatric cases scheduled for lobotomy.

We Santa Feans are living in a region of relatively uncontaminated air. By excluding pesticides from our personal environments, the health and well being of every person can be enhanced.

The instructor, Nina Robben, has devoted seven years to field investigation of the pesticide contamination of general and personal environments. Much of this research entailed on site investigations of chemical agriculture in four diverse farming and forestry regions of California, Oregon, Washington, and Nova Scotia, Canada. The latter four and a half years were spent camping out in wilderness regions and included visits to 46 states and lower Canada.

Recent work includes the adaptation of pesticide materials for human testing and a book which offers guidelines for researching organic food sources.

Under the auspices of the Ecological Land Conservation Co-op and the Environmental Research Foundation of California, she has given seminars on this and related subjects. She recently spoke before the Society of Clinical Ecology, a national group of physicians concerned with chemical hypersensitivity, at their annual conference in San Francisco, California.

The course's eight 1 1/2 to 2 hour sessions are:

- I. WHY PESTICIDES ARE THE FOCUS OF THIS COURSE
- II. HOW PESTICIDES AFFECT OUR HEALTH: mechanisms of affect and a discussion of petrochemical sensitivity - how it is caused and how to prevent the development of susceptibility
- III. AIR CONTAMINATION: rural, urban, and domiciliary and guidelines for discerning levels of contamination in all three
- IV. WATER CONTAMINATION: rural and urban and guidelines for determining contamination levels
- V. FOOD CONTAMINATION I: Avenues of pesticide contamination in food pre and post harvest and what chemicals to expect in any one food category
- VI. FOOD CONTAMINATION II: How to research organic food sources, which foods are the safest, brand names you can trust.
- VII. PERSONAL EFFECTS CONTAMINATION: Direct treatment and incidental contamination of manufactured products, non-pesticide uses, why we should avoid pesticide related chemicals.
- VIII. THE ALTERNATIVE: A PESTICIDE AVOIDANCE APPROACH TO LIVING: A case study of one family who practiced complete avoidance, detoxification of the personal environment - a discussion of alternatives to pesticide contaminated articles within the home.

The course begins January 19 at the College of Santa Fe. Classes are scheduled Thursdays, 8:00-9:30 p.m. Tuition is \$40. The course can be accredited at the rate of 1 credit for every 10 hours of class time. Interested parties may contact the Center for Continuing Education 982-6295.

FLASH!

THE RIO GRANDE EXECUTIVE COMMITTEE RESULTS

The Chapter Election Committee (Howard Adelstein, Betsy Fuller & Ingrid Volnhofer) submit the results of the balloting for Executive Committee members and the bylaw amendment.

Elected: Ken Adam
John Gavahan
Phyllenore Howard
Jim Stewart
Ted Zobeck

Amendment passed 75 votes for
8 votes against

Eighty-seven ballots were cast and counted. Three were in unsigned envelopes and were not counted.

CHAPTER DIRECTORY

The Sierran is not always able to get up to date reports of what is happening in the local groups. If you want to know what a groups activities will be, don't hesitate to call the chairperson.

Albuquerque: Nick Nicolaus
25864 Bradshaw S.E.
Alb. 87116
268-2040

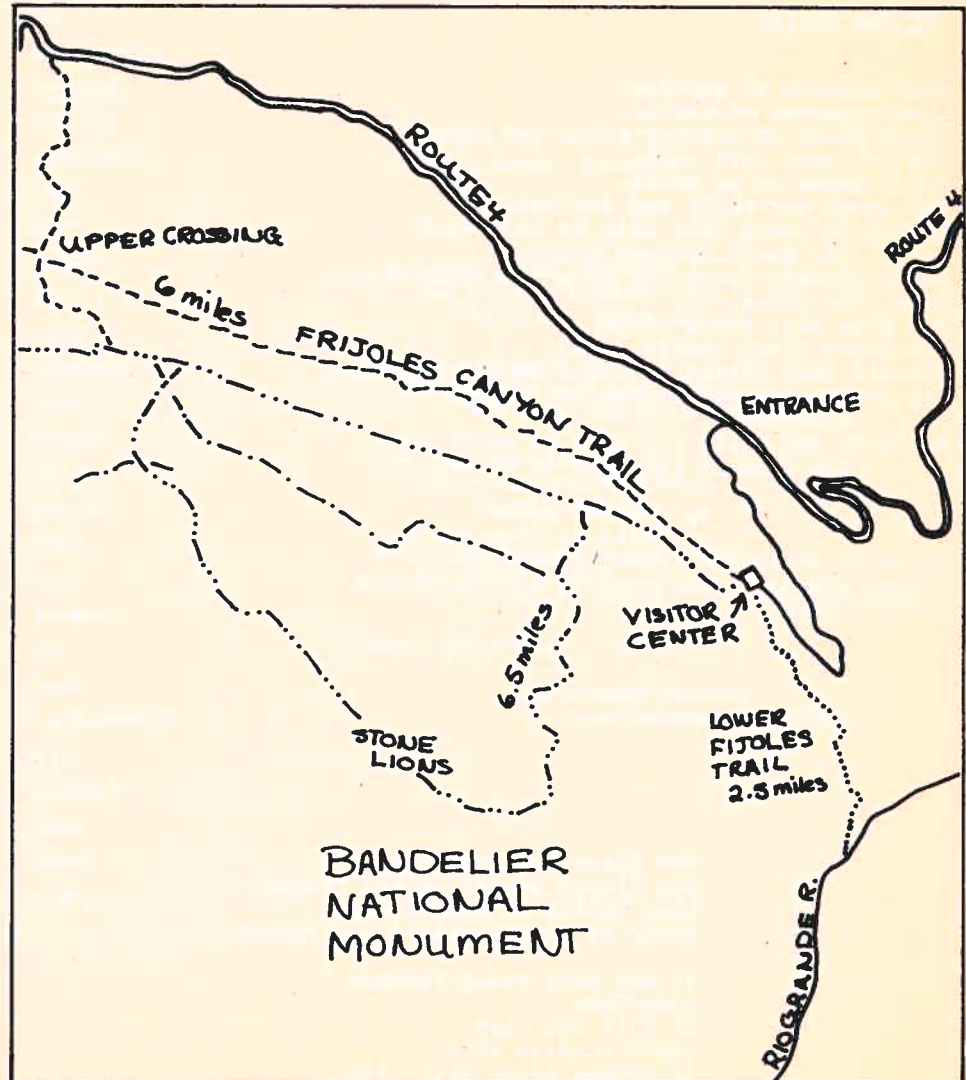
El Paso: Gayle Eads
8801 Darlina
El Paso, Texas
915-591-8685

Llanno Estacado (S.E.):
Ruth Bolin
821 W18
Portales, 88130
356-8395

Santa Fe: Katie Parker
535 Douglas St.
Santa Fe, 87501
983-5701

Southwest Regional Group:
Ted Zobeck
915 University Ave.
Las Cruces,
524-8764

A WINTER HIKE



TWO HIKES IN BANDELIER NATIONAL MONUMENT

Bandelier National Monument Visitor Center may be reached by taking Route 285 north from Santa Fe and then Route 4 towards Los Alamos; but keep left before Los Alamos and go through White Rock until you come to the road on the left to the headquarters.

Get a permit at the Visitor Center and they will show you the place for hikers to park, across the "Rito de Las Frijoles." Both hikes start from here. Probably the best winter hike is down the southeast trail. This delightful path follows the stream, and passes two spectacular water falls (for your own safety stay at the top of the falls). It is 2 1/2 miles to the Rio Grande, which you can happily explore in either direction. You may perhaps find some green plants in this more benign climate. Remember that the trip back up the steep trail will take more time and energy!

The second trip, starting at the same place, goes up Frijoles Canyon to the northwest. You may already have visited the Tyvoni Ruins near the Visitor Center, and perhaps would like to climb up the ladder to the Ceremonial Cave, which is indicated by a sign on this trail. Farther up the trail hops back and forth across the stream, often between steep rock walls in a stunning variety of shapes and colors. As you gain altitude the character of the trees will change. The summer wildflowers will be missing, but there is no lack of beauty! Turn back when you feel like it. The six miles (twelve round trip) to the upper crossing may be too much.

Neither hike should be done under icy conditions, and be sure to wear sturdy hiking boots, and warm clothes. Bring your own canteen, as the stream water is not considered safe.

NEWS NOTES

EPA Administrator Douglas M. Costle has ordered a halt to sales and use of the pesticide DBCP, believed responsible for causing sterility of reduced sperm levels among more than 100 workers who have produced the pesticide in Alabama, Arkansas, California and Colorado.

DBCP (dibromochloropropane), used in this country since 1955 to control destructive round worms in the soil of numerous crops and in home lawns and golf course turf, is also suspected of being a human cancer agent, based on its causing stomach and mammary tumors in laboratory rats and mice, Costle said.

"DBCP poses an imminent hazard to the public and to farmers and other persons who apply it," Costle added. He noted the calamity "again dramatizes the need for vigilant, reasonable regulation of chemical production and use."

from New Mexico Environment vol. 2 number 4 Oct. 1977

In its annual report to Congress on air pollution prevention, EPA states that atmospheric levels of particulates (dust) have been reduced 4 percent per year since 1971, "resulting in 33 percent fewer Americans breathing dangerous levels of the pollution in 1976," said EPA news release. The report said levels of sulfur dioxide have been cut 30 percent in urban areas from 1970-1975

"Although levels of photochemical oxidant (smog), carbon monoxide and nitrogen dioxide have not been monitored as long as the other pollutants--making national trends difficult to establish--encouraging evidence suggests progress has also been made in varying degrees in reducing levels of the contaminants," EPA's news release stated.

from New Mexico Environment vol. 2 number 4 Oct. 1977

RADIATION REGULATION to be REVISED

New Mexico licenses low level waste disposal and uranium mills. The state is presently engaged in a far-ranging revision of the regulations which apply to these licenses.

These proposed changes will address (finally) the problem of stabilizing uranium mill tailings, bonds to guarantee that this stabilization occurs, and a continued care fund for tailings and radioactive waste disposal.

Significantly, however, the regulations deny any real public participation in the licensing process. This means that there is no provision for public hearings on the licenses. Several organizations are working to remedy this deficiency, through the representation of the Southwest Research and Information Center.

Comments on the regulations should be addressed to:

THEODORE A. WOLFF
RADIATION PROTECTION SECTION
ENVIRONMENTAL IMPROVEMENT AGENCY
P. O. BOX 2348
SANTA FE, NEW MEXICO 87503



GET INVOLVED

If you are concerned about radioactive waste disposal in New Mexico there are various groups and organizations whom you can contact:

Santa Fe:

The Central Clearing House
338 East De Vargas
Santa Fe, N.M. 87501

Citizens Against Nuclear Waste
in New Mexico (C.A.N.W.I.N.)
338 East De Vargas
Santa Fe, N.M. 87501
982-4349

Albuquerque:

Southwest Research and Information Center
135 Harvard, S.E.
Albuquerque, N.M. 87106

N.M. Public Interest Research Group
P.O. Box 4564
Albuquerque, N.M. 87106

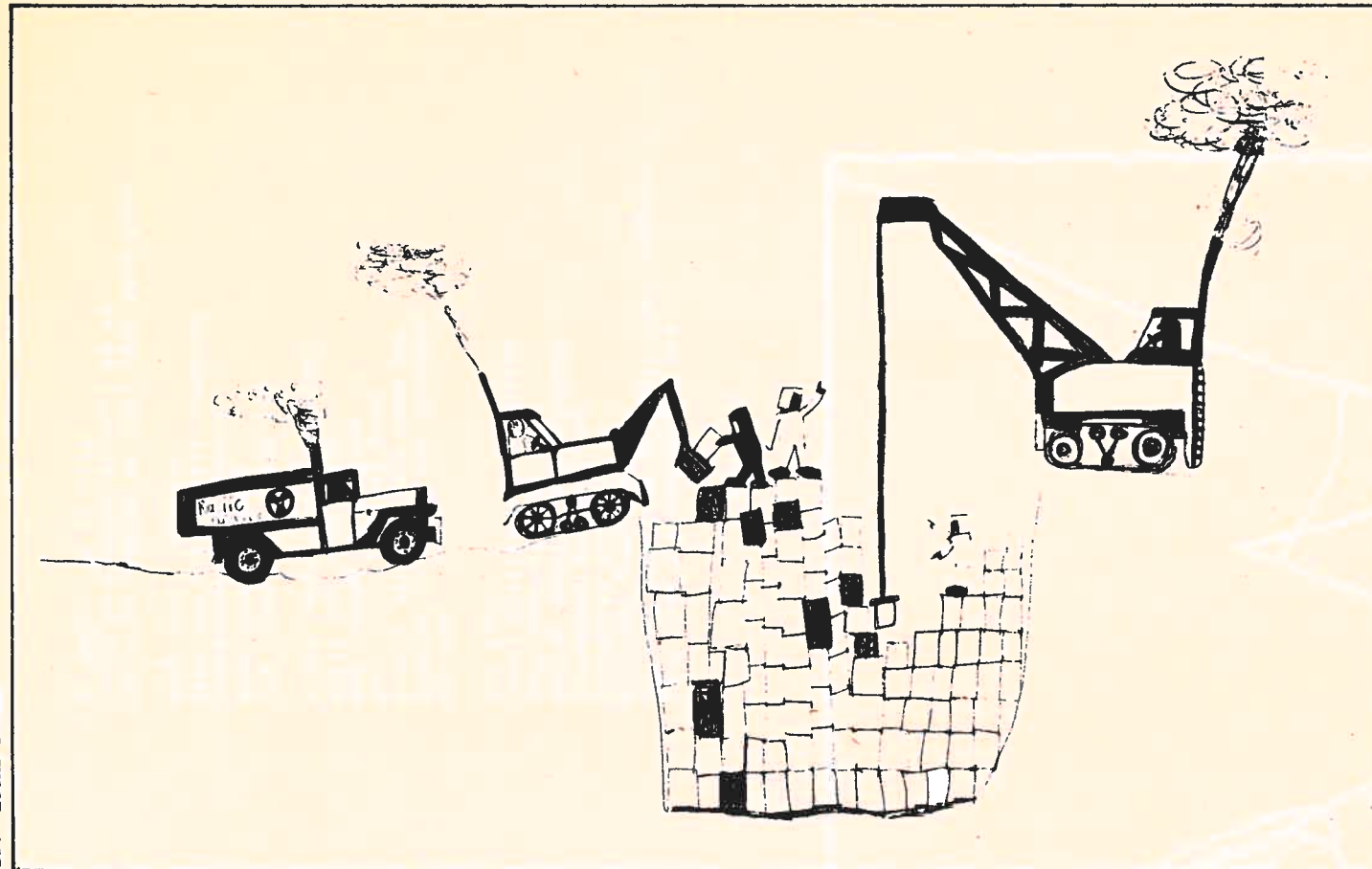
C.A.N.T. (Citizens Against Nuclear Threats)
102 Girard S.E.
Room 1261
Albuquerque, N.M. 87106

Las Vegas:

Alternatives to Nuclear Power
P.O. Box 115
Montezuma, N.M. 87731

Raton:

Moratorium
P.O. Box 819
Raton, N.M. 87740



BY: LUCAS EARNEY

RADWASTE DUMPSITE POSSIBLE in NORTHEASTERN NEW MEXICO

By: Ken Schultz

Chem-Nuclear New Mexico filed its license application last May. Together with supporting documentation from field and laboratory studies, consultants' reports, etc., the package is 4-5 inches thick. Chem-Nuclear calls the Cimmaron study the broadest, most detailed investigation of any low-level radwaste site in the country. Yet almost all those who have reviewed the document have found it inadequate.

In November, the Environmental Improvement Agency forwarded the comments of two of its divisions, along with the observations of 16 other individuals and organizations to the president of Chem-Nuclear Systems, Inc., Chem-Nuclear New Mexico's parent corporation. Although EIA director Thomas Baca called the agency's review "very preliminary at this time," the breadth and detail of the criticisms suggest that Chem-Nuclear has not done its homework very well despite company claims that the "application, reports and scientific data constitute an environmental report substantiating our view that the proposed facility is safe, and without adverse impact on the population and environment of Colfax County..."

Among the most frequent descriptive phrases found in the 130+ pages of comments are: "inadequate," "inconsistent," "lacking," "should be included," "data needed," "omitted," "ambiguous," and "contradictions."

A major criticism of the application was its lack of references to supporting work in the larger body of scientific literature. One reviewer, noting the "virtual absence of technical references in support of conclusions which are often highly argumentative," observed

that "this...is not in keeping with the standards of technical report preparation."

Chem-Nuclear claimed in the application that "The proposed site in Colfax County was selected on the basis of geologic and hydrologic conditions that will assure containment of the radwaste within the site, without migration or dissemination of radionuclides into water sources or the atmosphere where they could harm man or livestock or the environment." In its review of the application, the Water Quality Division of the EIA placed its primary emphasis on the documentation that might support this assertion.

The application failed the test. The Water Quality Division concluded that, "The geologic and hydrologic data and interpretations presented in the application fall short of providing the evidence necessary to assure containment of the radioactive wastes within the site boundary. In some areas, critical information is simply lacking...In other areas, calculations and projections have been made which completely ignore the known variability of the hydrogeologic system at the site."

Noting that, "The statement (in the application) pertaining to the site's isolation from water bearing rocks is misleading if not completely incorrect," the Water Quality Division recommended that Chem-Nuclear be required to submit a ground water discharge plan in accordance with the regulations of the New Mexico Water Quality Control Commission. The Division also found inadequacies in the company's proposed monitoring system for ground water, surface water, and soil moisture.

The Division also pointed

out a "very significant omission" in that "at no point does Chem-Nuclear commit to the implementation of remedial measures in the event that harmful excursions from the site are detected. There is no discussion of contingency planning or what specific measures might be taken" if the dump is found to leak. Staffers in EIA's Radiation Protection Section noted the same omission. "If the site were found to leak," they asked, "what would Chem-Nuclear do?"

The Radiation Protection Section also found inconsistencies in three important areas: exactly which radioisotopes are to be buried at the site, the quantities of each substance to be buried, and the specific radioactivity of the buried materials. The Section cited three conflicting lists of the materials to be buried and their quantities and wrote, "CNSI should be much more specific in its description of the material to be buried" (emphasis added).

Several reviewers challenged the applicant's risk analysis, either for including unfounded assumptions or for ignoring several possible events such as a fire or a "large instantaneous spillage."

Moratorium, Inc., a citizens group in Colfax County, expressed concern about the corporate relationship between Chem-Nuclear New Mexico, the applicant, and its parent company, Chem-Nuclear Systems, Inc., of Bellevue, Washington. "The separate nature of these corporations" Moratorium wrote, "may well have the effect of screening the larger, parent corporation from any liability or responsibility in connection with this application which it is in fact sponsoring..."

COMMERCIAL LOW LEVEL RADWASTE DISPOSAL:

an infant industry with growing pains

BY: KEN SCHULTZ

A company called Chem-Nuclear New Mexico, Inc. wants a license to bury radioactive waste in shallow trenches in the ground near Cimarron in the northeast part of the state. The New Mexico Environmental Improvement Agency is now reviewing the company's license application, a process that agency representatives expect to take about two years. If the license is granted, New Mexico will be home to the seventh commercial "low-level radwaste" burial ground in the country.

Before we allow this industry into New Mexico we should consider some recent events at existing low-level radwaste dumps and the conclusions and recommendations of several investigations into low-level radwaste disposal problems. The decision to license a radwaste dump in the state is a decision about the future of New Mexico. It can have a severe impact on the state's environment and on its economy.

The "peaceful" uses of radioactive materials has grown markedly in the last 30 years. By the end of 1976 there were almost 20,000 licensed users of radioactive materials in this country, up from approximately 10,000 15 years earlier. Nearly all uses of radioactive materials produce radioactive wastes which must be disposed of very carefully because of their danger to human health. The great majority of these wastes come from the so-called nuclear fuel cycle - the use of radioactive materials to produce electricity.

"High-level" wastes from nuclear fuel reprocessing plants can only be disposed of at a federally operated repository like the one the Department of Energy is planning to locate in the salt beds east of Carlsbad. This is because high-level wastes contain materials that remain dangerous for thousands of years and because they produce temperatures of hundreds of degrees.

"Low-level" radwastes, however, can legally be buried in shallow trenches cut into the surface of the earth at sites operated for profit by private corporations. There are six commercial low-level radwaste dumps in the United States today. They are located in New York, Kentucky, South Carolina, Illinois, Nevada, and Washington.

Commercial dump sites accept wastes from a variety of sources - hospitals, research labs, industrial firms, universities - but according to a study for the Atomic Industrial Forum almost 90% of the total low-level radwaste volume thru 1988 will come from nuclear power reactors. Although there are no nuclear power reactors within New Mexico's borders, we are being asked to accept the wastes from reactors in other states as far away as North Dakota.

COMMERCIAL RADWASTE DISPOSAL

In 1960, as part of its program to promote the development of a private nuclear power industry, the Atomic Energy Commission announced a new policy for the disposal of commercial low-level radioactive waste. Henceforth, the Commission ruled, these wastes were to be buried at regional sites operated by private companies. There being no such sites selected at that time (nuclear energy had until

recently been a government monopoly) the AEC continued to accept commercial waste at its dumps in Idaho and Tennessee until private companies could select sites and obtain licenses for them.

Two years later, in Sept., 1962, the AEC issued the first commercial burial site license to Nuclear Engineering Company (NECo) for a dump near Beatty, Nevada. Later that same year NECo got a second license for a dump at Maxey Flats, Kentucky. The following year Nuclear Fuel Services obtained a license for its site at West Valley, New York. Not long after, in May, 1963, the AEC quit accepting commercial waste. Low-level disposal was then entirely in corporate hands.

Since 1963 the number of sites has doubled. NECo opened two more sites at Hanford, Washington (1965) and Sheffield, Illinois (1967). Chem-Nuclear Systems, Inc., the parent of Chem-Nuclear New Mexico, entered the business in 1971 with a dump at Barnwell, South Carolina.

Last year Nuclear Fuel Services closed West Valley site and quit the business. That left only two companies engaged in burying low-level radioactive waste. Chem-Nuclear considers itself "at a competitive disadvantage with its major competitor in the radioactive waste disposal business, since (NECo) already has four licensed sites." Chem-Nuclear has only the one site in South Carolina. Because "(t)here is considerable price competition in the business of disposal of radioactive waste" and because "(g)eographical location of licensed burial sites is important in competing for disposal business, since transportation is a major item of expense," Chem-Nuclear would very much like to open a dump in New Mexico to compete with NECo's sites in Nevada, Washington, and Illinois. As we will see later, the need for additional licensed radwaste dumps, if any, is in the eastern U.S., not the west.

DISPOSAL OPERATIONS

All six licensed dumps operate in pretty much the same way. As wastes are received at the site they are thrown from the trucks directly into a trench. They are buried in the containers in which they were shipped. These packages are typically cardboard boxes, wooden crates, or steel drums. No attempt is made to stack or otherwise position the packages to most efficiently use the space within the trench. As the waste nears the top of the trench it is covered with several feet of earth.

Chem-Nuclear intends to operate the Cimarron dump in the same way. The company's initial plans call for digging two trenches per acre within a 50 acre site. Each trench will measure 500' x 50' x 25'. The company's Quality Assurance and Procedures Manual says that as waste packages arrive at the site, they "will normally be removed from a truck directly into the burial trench. Generally, no effort will be made to stack or position these wastes."

Alternatives to this standard method of disposal have never been examined, though it is becoming clear that they should be.

PROBLEMS BEGIN TO SURFACE

The low-level radwaste dump at Maxey Flats, KY, licensed in 1962, was the second commercial burial ground in the country. In the early 1970's Kentucky officials became concerned about the increasing accumulation of water in completed trenches at the site. In late 1974 the state released the results of a special six-month environmental study of the dump. The study concluded that the burial ground was leaking radioactivity into the unrestricted local environment. Tritium (a radioactive form of hydrogen), cobalt-60,

strontium-89 and -90, cesium-134 and -137, and plutonium-238 and -239 were identified as having moved from the site. Though Kentucky officials assured the public that the movement of these materials did not present a public health hazard at that time, the state expanded the committee studying the problem. A few months later the enlarged committee recommended a six-point program of further study to more completely define the Maxey Flats situation. The committee estimated that it would cost more than a million dollars to complete all six studies.

In March, 1975, the Nuclear Regulatory Commission learned that two trenches at the West Valley, NY site were leaking water contaminated with tritium. The water was seeping out of the caps covering the trenches. There should have been no water in the trenches in the first place but the covered wastes had compacted and the trench began filling with surface water. When the trench flooded, the water began seeping through the low end of the caps over the trench. So, after less than 15 years of operation, two of the first three low-level disposal dumps had begun leaking.

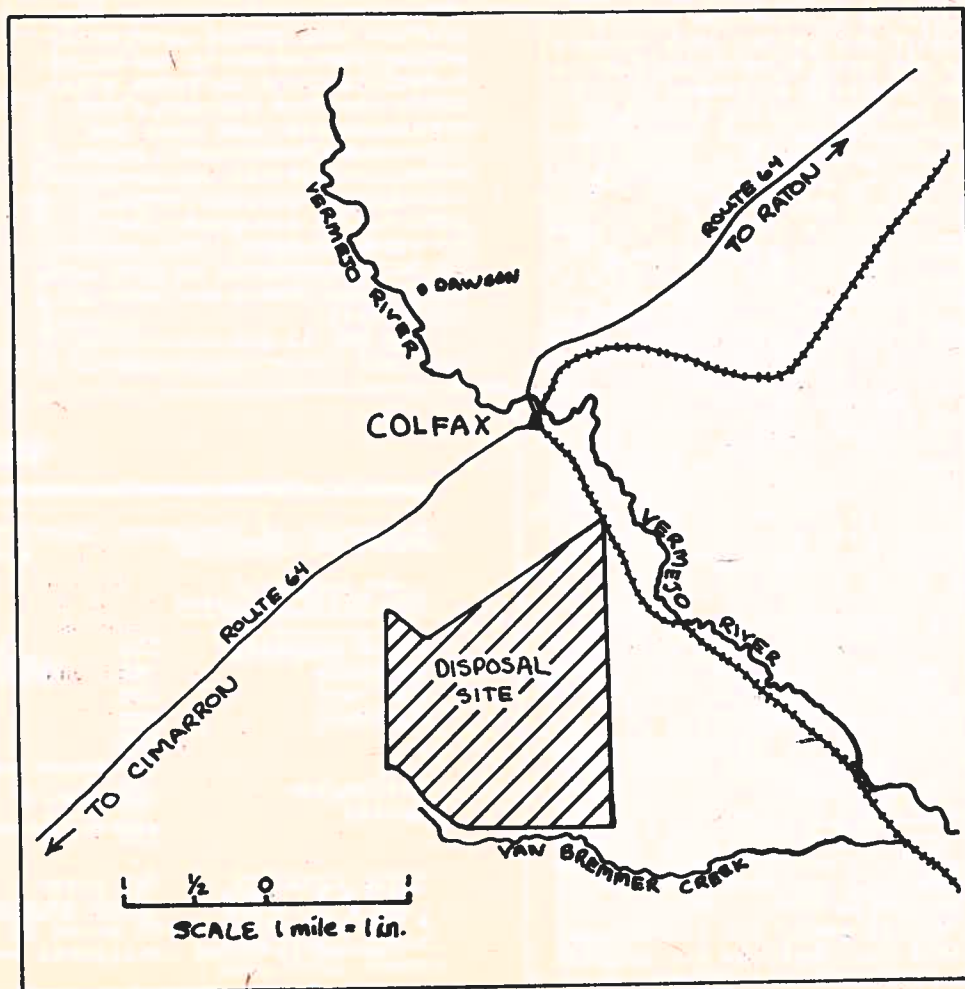
Nuclear Fuel Services, the operator of the West Valley site, suspended operations and tried to negotiate a new operating agreement with the state of New York. But a little over a year later NFS decided to get out of the business and close the whole West Valley complex (which included the only commercial fuel reprocessing plant ever to operate in this country). The company is now trying to turn the whole project over to the state of New York under the terms of the license agreement. It may cost the taxpayers of the state hundreds of millions of dollars to deal with just the high-level waste stored at the reprocessing plant.

In March, 1976, investigations at NECo's Beatty, Nevada dump revealed that a cement mixer used at the burial ground to solidify liquid low-level radwaste had been used in the town of Beatty to pour concrete slabs at a local saloon and at other private properties. In addition it was discovered that for several years NECo employees had been removing contaminated tools, equipment and supplies from the site in direct violation of the dump's license.

As these problems attracted considerable nationwide attention, many governmental bodies began to investigate. Uniformly they concluded that the present structure of our national radwaste management program is inadequate.

For example, a January, 1976 report by the General Accounting Office, Congress' watchdog on the executive branch, reached the following conclusions, among others:

- No systematic site selection criteria exist to establish the best locations for disposal sites;
- Disposal sites had "not been selected on the basis of detailed studies and evaluations of the hydro-geological characteristics" of the site, but rather on the basis of convenience and economics;
- No standards had been developed for determining when radioactivity migration at disposal sites reaches unacceptable levels;



Radwaste Disposal cont. from page 3

--Lack of information about site hydrology and geology had prevented the establishment of effective monitoring programs at disposal sites;

--State and federal governments had failed to establish long-term-care requirements for commercial disposal sites and to assure the adequacy of funding provisions to meet such requirements.

Following the release of this report the Conservation, Energy and Natural Resources Subcommittee of the House Committee on Government Operations began an investigation. Three days of hearings produced damning testimony from several sources.

An Environmental Protection Agency representative told the subcommittee that "actual exposures to population groups from natural radioactive materials, transuranic waste, and low-level waste involve more immediate public health problems" than do high level wastes. EPA witnesses also admitted that it was true that "our present shallow surface burial methods...are just not suitable for containing even the low-level radioactive wastes."

The United States Geological Survey followed with its own damaging testimony. "It now seems apparent" said the USGS representative, "that, on hindsight, even considering the state of technology at the time, more attention was given to the economics of handling the material, and to the cost, location, and ready availability of the site for burial use, than was given to the ultimate fate of the waste...The burial sites were intended to contain radionuclides for hundreds or even thousands of years, yet, in the first 12 years of operations, migration beyond expectations of radionuclides has been detected at several sites.. It is probable that some of the other burial grounds also release radioactive nuclides to some extent. The releases to date are not known to constitute a major health problem, but they do indicate that something has not worked as planned."

The House Committee released its own report on the matter in June of last year. The Committee severely criticized the present low-level waste disposal program and called on the government agencies involved to take immediate administrative action to cope with the problems identified. The Committee pinpointed three major problems: "First, it now quite clear that sharpened criteria need to be established regarding waste form specifications...and disposal site selection. Second, the steps to be taken following decommissioning of various disposal sites once they are full should be determined. Third, important financial arrangements necessary to guarantee long term care of decommissioned sites by State or Federal authorities need further definition."

Noting that "(disposal) site management and monitoring appears to be a fairly primitive art" the Committee suggested that "there may well be a need for the NRC to reassert regulatory jurisdiction over all commercial sites..." because "the most urgent need to be faced is that of uniformity of standards in the licensing of these facilities."

As criticism of the radwaste management program mounted, the Nuclear Regulatory Commission appointed a staff task force to study the existing program and

to make recommendations for its improvement.

RADWASTE MANAGEMENT AND REGULATION

Unlike other portions of the nuclear fuel cycle, the regulation of commercial low-level radwaste is largely in the hands of the states where the dumps are located.

Until 1954 the federal government had a virtual monopoly on atomic energy activities. The Atomic Energy Act of that year allowed private industry to enter the field under the regulation of the Atomic Energy Commission. From then until a 1959 amendment to the Act, the AEC was responsible for licensing all users of nuclear materials. The 1959 amendment (section 274 of the Atomic Energy Act) allowed the AEC (now the Nuclear Regulatory Commission), the federal agency with overall responsibility for the safety of the nuclear power industry, to enter into agreements with those individual states wishing to regulate and license users of certain radioactive materials. State licenses cover industrial, commercial, medical, educational, or other uses of "byproduct, source, or special nuclear material. Some uses of radioactive materials, however, may not be licensed by a state. The Commission is solely responsible for licensing and regulating any nuclear production or utilization facility; the import, export, or disposal at sea of byproduct, source, or special nuclear material (SNM); or the disposal of any material as the commission determines, because of its hazardous nature, must be under NRC control.

Thus a state may license a hospital radiology lab, but not a nuclear power plant. It may license a uranium mill or a low-level waste disposal site, but not a fuel enrichment plant nor a high-level waste disposal site.

As a condition to the agreement with a state, the NRC must find "...that the State program is compatible with the Commission's program for the regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement."

Kentucky became the first agreement state in 1962. New Mexico was the last of 25 states to enter the program when Governor Bruce King signed an agreement in 1974. The 25 agreement states are now responsible for 10,800 licenses. New Mexico licenses more than 100 users of radioactive materials. The NRC manages an additional 8,600 licenses in the rest of the country. Five of the six existing commercial low-level radwaste dumps are located in agreement states (South Carolina, New York, Kentucky, Nevada and Washington), though Illinois is reportedly considering agreement state status.

NRC TASK FORCE REPORT

The NRC Task Force Report on Review of the Federal/State Program for Regulation of Commercial Low-Level Radioactive Waste Burial Grounds was published in March, 1977. The task force essentially confirmed the criticisms already voiced against the current program, and recommended major changes in it.

First among the recommendations was that the NRC should seek to increase federal control



OFF PROPERTY TO THE SOUTH OF VAN BREMMER C.



HIGH POINT TO NORTHEAST OF COLFAX

By: Al Top Courtesy of the New Mexico Environmental Improvement Agency

over low-level waste disposal by requiring joint federal/state approval of new disposal sites; NRC licensing, with state participation, of current and new disposal sites; federal ownership of land for all disposal sites; and by establishing a federally administered perpetual care program to assure the safety of a site after it is closed.

The task force's second recommendation was that the NRC, in cooperation with appropriate federal and state agencies, should accelerate the development of adequate regulations, standards and criteria for low-level radwaste disposal with emphasis on:

a. Developing operating, monitoring, decommissioning, post-operational maintenance and funding requirements for both existing and future burial sites.

b. Developing criteria for the acceptability of future proposed shallow land burial sites or alternative disposal methods.

c. Developing criteria for determining which wastes can be disposed of by shallow land burial.

Noting that since the enactment of the National Environmental Policy Act (NEPA) there had been no comprehensive examination of alternatives to shallow land burial, and estimating that there is sufficient burial capacity to serve until 1990, the Task force's third recommendation was that the NRC should immediately begin a study to identify and evaluate alternative disposal methods and that no new sites should be licensed until this examination is completed or until an urgent need for a new site is identified.

The NRC is now considering the task force recommendations.

THE NEED FOR A NEW SITE

Though some segments of the nuclear power industry have challenged the task force conclusions about the capacity of existing sites and the time remaining before they are filled, there appears little disagreement about where a new site will be needed: the eastern U.S.

Two estimates of the acreage remaining for trench burial are shown in TABLE 1. The first estimate is taken from the NRC task force report and shows the remaining acreage for each site. The second estimate is from a study for the Atomic Industrial Forum, a trade association. It breaks the acreage down on a regional basis (eastern and western United States.)

Though the AIF study estimates only 358 acres of "licensed usable area" in the country, the report also notes that there are 1400 unlicensed additional acres at existing sites.

The problem, says the AIF study, is that roughly 93% of this "expansion acreage" is in the west while 90% of the nation's radwaste is generated in the eastern part of the country. Furthermore, the Kentucky and New York sites are now closed, and unless NECo can get additional acreage licensed in Illinois the Chem-Nuclear dump in South Carolina is the only disposal site readily available for most of the waste. Indeed, Chem-Nuclear now claims to be accepting 64% of the nation's commercial low-level radwaste at Barnwell.

Clearly, if an additional waste dump is needed, it is not needed in New Mexico which has no nuclear power plants.

TABLE 1

Estimates of Remaining Capacity in Acres at Existing Low-Level Radwaste Dumps

NRC Staff Estimate		AIF Study Estimate	
South Carolina	250		
Kentucky	60		
New York	200		
Illinois	100		
	610	Eastern U.S.	234
Washington	90		
Nevada	60		
	150	Western U.S.	124
TOTAL CAPACITY	760 acres		358 acres

* The addition of 100 acres to the Sheffield, Illinois site is currently being considered by the NRC.

4-FEB, 1978

LETTERS TO THE EDITOR

December 7, 1977

Dear Nancy & Stephanie,

During the month of October, my wife and I travelled 2000 miles for the Rio Grande Chapter. It all started when Phyllenore Howard called for volunteers to help publicize the 1974 Clean Drinking Water Act. This meant spending long hours on telephones, seeking invitations from service clubs throughout New Mexico. I guess we talked about \$40 worth! This got us invitations to meet with six clubs.

The Lions of Carlsbad and the Kiwanians of Roswell welcomed us first. It was great to visit the fine Southwestern State Park out of Carlsbad. Another week, we tripped to Gallup by way of wonderful, historic El Moro. It's great in the fall. Clear, crisp air, untrammelled trails, and glorious views in every direction. The Gallup Kiwanis club was our host.

Then it was back to the southeast. The ladies of the American Legion Auxiliary greeted us in Hobbs. That's quite an area, so very different from the rest of our State: oil wells, gas wells, potash mines, big trucks lumbering off. A very different scene. The Rotarians of Artesia were our next hosts. Several of their members spoke to us after the meeting. They were quite surprised to find that "Not all Sierra Clubbers were complete nuts!" or words to that effect. A somewhat similar reaction was voiced by Rotarians in Silver City a week later.

We found that the public, as represented by these various groups, did possess partially negative feelings about our organization. We also felt that this sort of presentation did a bit to allay such reactions. Finally, we concluded that the menus of New Mexico's service clubs are very good indeed.

Sincerely,
Jim Cooper
Albuquerque

ANNOUNCEMENTS!!

Steven Brack of Belen will be the featured speaker at the January meeting of the New Mexico Native Plant Society. The meeting, a joint meeting of the NMNPS and the New Mexico Wildflower Society, will be at 7:30 p.m. on Friday, January 13 at St. Timothy's Lutheran Church on the corner of Jefferson and Copper in Albuquerque. Mr. Brack will present a slide-talk on Cacti and Xerophytes of New Mexico. The public is invited to attend.

The New Mexico Native Plant Society is a group of New Mexicans who meet monthly to learn about native plants. Membership in the group offers monthly programs during the winter season and field trips in spring and summer to observe native plants in their natural environment. There is also a monthly newsletter, an annual plant sale, and special prices on publications dealing with native plants. For information about the organization, contact Claudia Hubbard, 2097 Camino Lado, Santa Fe, New Mexico.

PERMITS ISSUED FOR ATLANTIC OCS DRILLING

By: G. Coan for the National News Report

The Department of Interior has issued permits to several oil companies to drill the first exploratory wells off the central Atlantic Coast, and the Environmental Protection Agency has granted its permission for the drilling to proceed. The exploration is slated to take place in the Baltimore Canyon.

Milton Oliver, Chairman of the Club's Subcommittee on Off-shore Oil & Gas, said that the permits did not come as a surprise in light of the recent Court decision lifting a previously imposed ban on lease sales. At its most recent meeting, the Club's Board of Directors called on President Carter to hold up additional lease sales until the amendments to the Outer Continental Shelf (OCS) Lands Act are passed. Oliver said that Massachusetts Governor Michael Dukakis has commitments from House Speaker Tip O'Neill to move the bill early in January. Sales are scheduled on George's Bank off New England in January and off the South Atlantic Coast in March.

The Marvels of a Sierra Club National Service Trip

By: Rafaela Schuller

Many of us had the opportunity to enjoy some of the wonderful Sierra Club outings. But as I know, I was the only one from El Paso to take part in a service trip so here is my account:

We went to the Uinta Mountains in Utah and in two days we picked up an unbelievable amount of garbage around several alpine lakes and obliterated the old unsightly fire rings. Then we moved up to another chain of lakes called Atwood Lakes; picked up more garbage and junk, many tons of it and then enjoyed leisure. Whatever one chose to do, disporting in a little bit of swimming in icy water, short side trips, some reading, fishing or just looking at the green grass dotted with flowers, the snow covered giant mountains reflecting in crystal clear lakes--was great. Still more garbage was picked up on our way back along a different water shed.

In spite of all the work which was self-rewarding and fun in such beautiful surroundings, I found the trip quite relaxing. The mules took our commissary up and garbage down. The pace was moderate thanks to good planning and some sore knees and ankles. We were picked up by our fearless leader, Steve Silverman, at the bus and plane terminals. He took care of our needs like a mother hen during the whole trip and on the way back before we parted he

even paid for a hot shower for all of us. So we all smelled like violets when he hugged us goodbye.

Another refreshing feature was the behavior of the kids who were in the majority. In their sense of duty, hobbies, and plans for the future they showed a surprising maturity. For example, our cook and her helper were mere high school girls and yet they accomplished a perfect mastering of their job. It puzzles me till now how they managed after a day's march to serve us a gourmet four-course dinner in half an hour.

Hope to see you next year on one of the Sierra Service Trips. Try it, you will like it. It cost only \$50 for about 10 to 14 days.

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Wild Should Wild Remain.

"Man always kills the thing he loves, and so we the pioneers have killed our wilderness. Some say we had to. Be that as it may, I am glad I shall never be young without wild country to be young in."

ALDO LEOPOLD

"Integrity is wholeness, the greatest beauty is organic wholeness, the wholeness of life and things, the divine beauty of the universe. Love that, not man apart from that...."

ROBINSON JEFFERS

"The love of wilderness is more than a hunger for what is always beyond reach; it is also an expression of loyalty to the earth, (the earth which bore us and sustains us), the only home we shall ever know, the only paradise we ever need—if only we had the eyes to see."

EDWARD ABBEY

"We need wilderness preserved—as much of it as is still left, and as many kinds... It is important to us... simply because it is there—important, that is, simply as an idea."

WALLACE STEGNER

Sierra Club



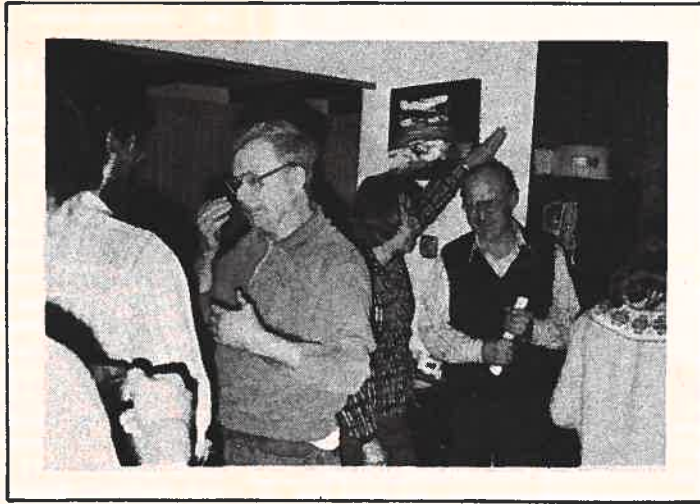
* IF YOU WISH TO VOICE CRITICISM, PRAISE OR INDIFFERENCE TO THIS NEWSPAPER, EXPRESS YOURSELF BY WRITING A LETTER TO THE EDITOR, Rio Grande Sierran, 338 East de Vargas, Santa Fe, NM 87501.

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FOTO'S of the Sierra Club executive committee meeting in Los Alamos—December 3, 1977



half of Betsy Barnett, Phyllenore Howard, Ann Bancroft Ted Zobeck, John Gavahan (half), Joanne Sprenger (back) John Schneider



John Gavahan, Joanne Sprenger, Joe Parker



Ted Zobeck, Joanne Sprenger, Betsy Barnett



John Gavahan, John Schneider

WILDLIFE INTERESTS TAKE CLOSE LOOK AT RECLAMATION PROJECT

The Bureau of Reclamation has issued a draft environmental impact statement on the Pecos River Basin Water Salvage Project. Planned is 24,000 acres of salt cedar clearing and continued maintenance clearing before 1971. Sierra Club members are concerned that wildlife resources will suffer because of loss of habitat. Riparian habitat including the salt cedar in the Pecos Valley provide unique nesting habitat for doves and songbirds and habitat for many other wildlife species. The New Mexico Department of Game and Fish and the Fish and Wildlife Service have indicated concern about habitat loss with the project. These agencies have indicated to the Bureau of Reclamation that wildlife information is not complete enough and that the project is damaging wildlife resources. In a recent statement at a Roswell public hearing the Fish and Wildlife Service requested that no new clearing be conducted until new studies are completed. New Mexico Department of Game and Fish comments on the draft impact statement also indicated no new clearing should be conducted.

Comments supporting the wildlife agency viewpoints should be sent to the Regional Director, Bureau of Reclamation, Herring Plaza, Box H-4377, Amarillo, Texas 79107 and the Secretary of Interior, Washington, D.C.

The Legendary — Rafaela

By: Paul Garland

Rafaela Schuller, El Paso's legend in her own time, has been a working member of two national Sierra Club service outings, has been on at least one national knapsack trip, and has been on more local outings than anyone else in the El Paso Group.

Having immigrated from Czechoslovakia after living in France and Germany, Mrs. Schuller spoke four languages before she moved to El Paso. Working as a Registered Nurse with many Spanish-speaking patients, she has now become fluent in Spanish.

Mrs. Schuller has been presented with a specially painted inner tube named the "H.M.S. Rafaela," recognizing her support for the Club's Rio Grande float trips, and a T-shirt with the phrase "Czek Power." In addition to these gifts, the El Paso Regional Group has initiated an annual clean-up outing in honor of Mrs. Schuller.

Giving lie to the claim that only the young, rugged, and rich can enjoy the wilderness, Rafaela Schuller recently celebrated her 70th birthday. Oh yes, she really does hike in tennis shoes!



Photo by: Broster

The newly commissioned river boat, the H.M.S. Rafaela, and its namesake and skipper, Mrs. Rafaela Schuller.

!!!! JOB OPPORTUNITY !!!!

- Position:** Environmental Lobbyist (concentrating in deposits on bottles and cans and waste disposal charge.)
- Salary:** \$10,000 a year to begin, \$12,000 by January 1, 1979; plus full medical benefits, two weeks paid vacation and two weeks leave without pay (optional).
- Term:** Minimum two-year commitment, beginning January 1978.

Description of Organization: Environmental Action is a national citizens' lobbying group based in Washington, D.C. The organization publishes *Environmental Action* magazine and is supported by dues from 20,000 members. EA's legislative project employs five lobbyists and a field organizer working to pass national legislation affecting urban environmental quality. Areas of legislative concern are: water pollution, toxic substances, solar energy, transportation, solid waste, mandatory beverage container deposit legislation and disposal charges. The new lobbyist will concentrate on deposit legislation and disposal charges, two areas in which EA has traditionally been the lead national environmental organization.

Description of Job:

- I. Building Political Support:** Generate support for issues by the public and by national environmental and other types of organizations.
- II. Legislative Lobbying:** Work with appropriate Senate/House committees and with sponsors of legislation; work with EA field organizer to bring constituent pressure on Congress.
- III. Media:** Stimulate coverage of issues by national and local media.
- IV. Administrative Lobbying:** Monitor research and federal programs, and promote favorable positions by federal agencies.

Desirable Experience: Previous work with citizen organizing at local or national levels, with legislative lobbying at local or national level; previous work with media; and/or familiarity with issues. Especially desirable is seasoned political judgement.

How to Apply: Resumes should be addressed to Environmental Action, Legislative Project, 1346 Connecticut Ave, N.W., Washington D.C. 20036. (No telephone calls please.) Allow up to eight weeks for a response. All resumes will be carefully read, but only five applicants can be interviewed for the job.

SAVE THE TALLGRASS PRAIRIE

A new Congressional bill calling for the establishment of a Tallgrass Prairie National Park & Preserve in the Kansas Flint Hills has gained the support of the Southern Plains Regional Conservation Committee of the Sierra Club.

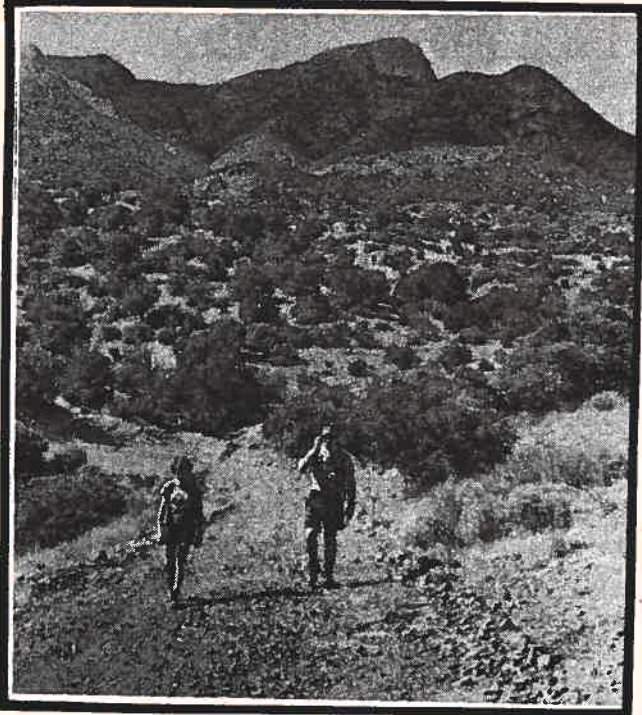
U.S. Rep. Larry Winn, Jr. early this fall introduced H.R. 9120 which proposed a Tallgrass Prairie National Park & Preserve totaling 187,000 acres, about 58% of which would be "park" and the rest an adjoining "preserve" with fewer restrictions than the park area.

Location is the "Chase South" site favored by Save the Tallgrass Prairie, Inc., the leader in efforts toward preserving a significant tract of the last of the American tallgrass prairie as a natural area. The proposed site is south of the Kansas Turnpike and takes in the corners of Chase, Lyon, Butler and Greenwood counties.

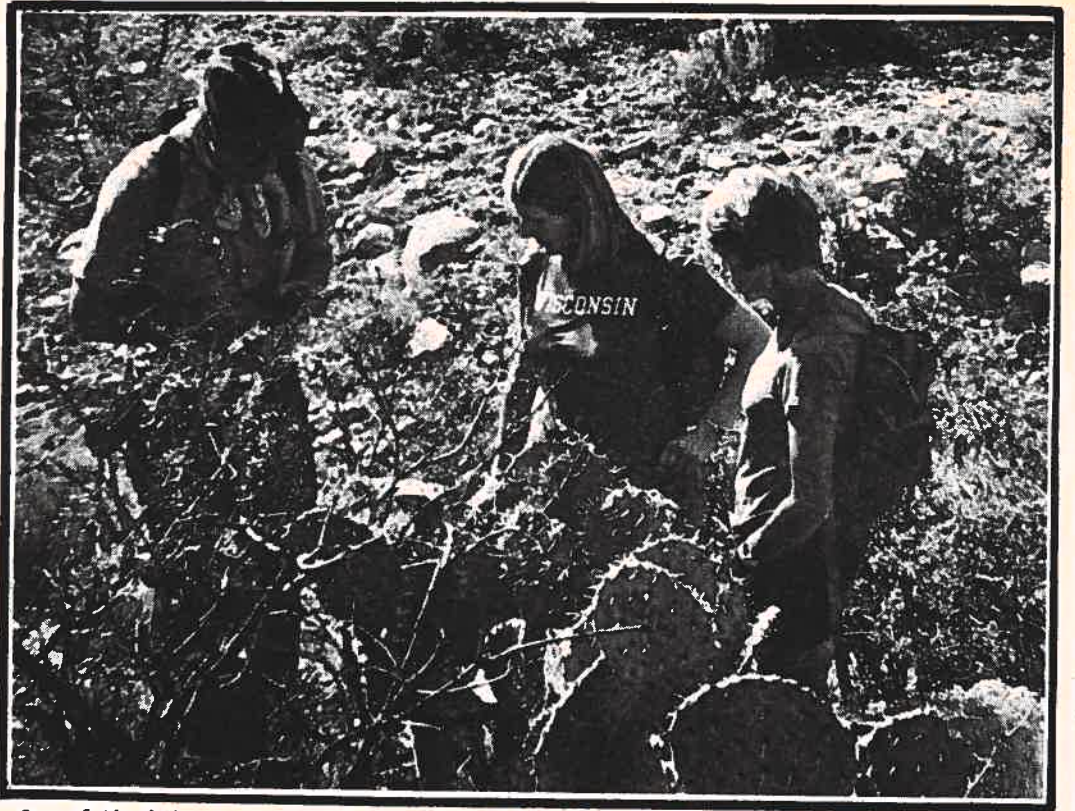
At its October 9th meeting in Emporia, Kansas, the SPRCC adopted a resolution supporting in principle H.R. 9120, urging speedy enactment of the legislation and calling on all Sierra Club members to work actively for this addition to the national park system.

Cosponsors of the Winn Bill (H.R. 9120) are needed to assure House action. Notify your congressman and ask him to cosponsor the Winn Bill. Letters should also be sent to Congressman Winn supporting his efforts toward the establishment of the Tallgrass Prairie National Park and Preserve.

Excerpt from a letter sent by Nancy Jack, Chairman, Kansas Chapter, Sierra Club



Getting a workout in the middle of nowhere. If you look in the distance you'll see another hiker.



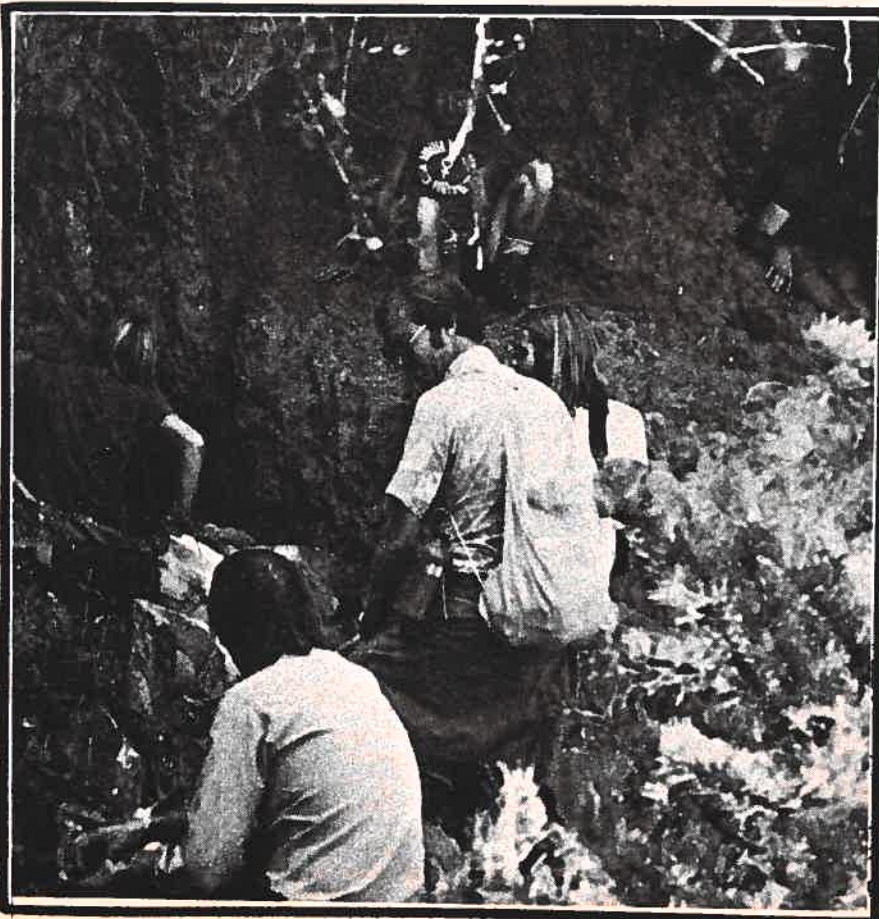
One of the hiker's stopped to try Prickly Pear Cactus at the start of the hike.



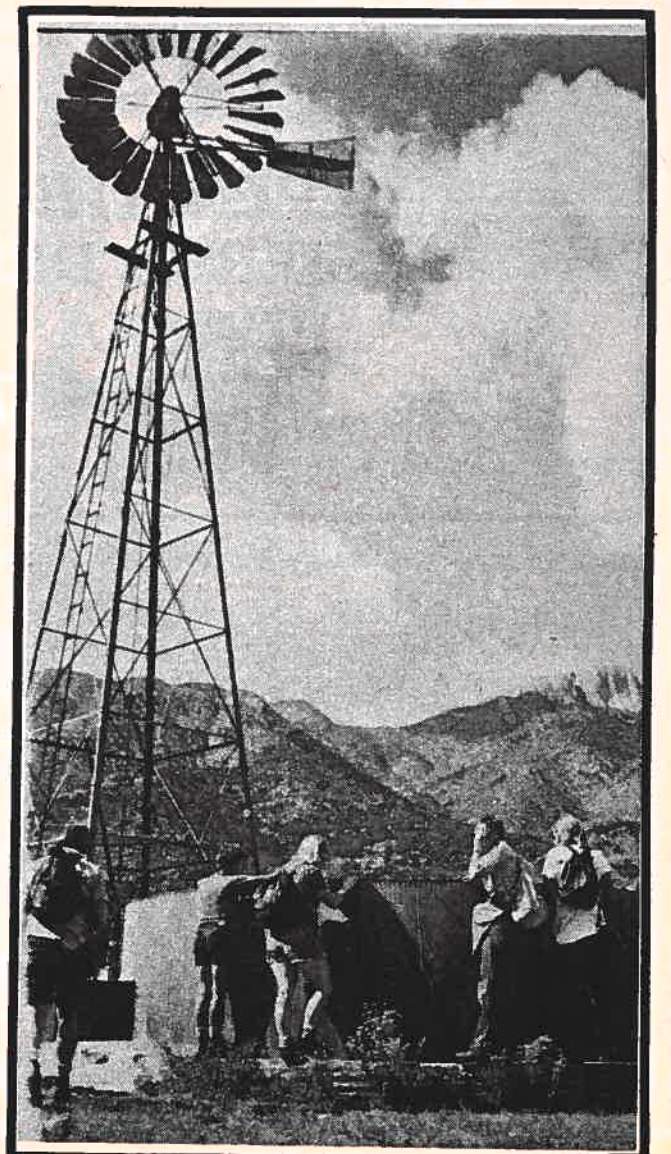
Looking down one of the several mine shafts located around the Ghost town.

A Las Cruces Group Pictorial Hike to Cooke's Peak

PHOTOS BY: GALE FINNO



You'll notice two cave openings, one to the left of the photo and one to the far right. The left cave opens into a room that could hold around four people.



Checking out an old watering hole for cattle.



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Desert Delight? Navajo Cheese!

BY: GORDON SOLBERG

You just got home from your weekly trip into town. You've brought all the groceries in, hustled the bags of cement out to the shed. Now it's time to relax in the old easy chair, kick off your boots, and think about...cottage cheese?

"Lord, town's gotten me again, I see," you say.

(These irrational desires usually come bubbling to the surface right after your mind's been paddled to pieces by the gigantic eggbeater of Centreville, right? That town sure scattered last week's equilibrium all to bits, didn't it? I mean, that old woman almost ran you...she almost turned you into a red mark on the K-Mart parking lot, that's what! And the feed mill was out of milo! Milo! I mean, a feed mill without milo is like The Mother Earth News without Plowboy! And that feed mill clerk almost acted proud that he was out of milo, and that you were an idiot to ask! And the bank! Don't forget Centreville National "Your Friendly" Bank! The teller smiled at you real pretty and smooth and said, "klik I'm sorry sir but we cannot cash an out-of-town check unless you have an account with us klik." And on the way home the radio kept playing the bank's jingle over and over: You're not a number/You're a friend/At Centreville Bank/The bank that really cares.)

With chives! (Hmmm, this cottage-cheese-with-chives kick must be how the ole homestead reinserts you back into this-here alternate contingency structure, you reckon?)

Yeah! With just a bit of salt, not too much, just enough to bring out the snappy texture of each individual curd as it wallows its way back along your tongue and ...

Why not? There's a gallon of goat's milk in the refrigerator, a patch of chives along the outhouse path, a box of rennet in the cupboard, and a cookbook that tells you how to put it all together...You sure can't make cottage cheese with chives like this back in Centreville!

So you pour a quart of milk to start warming in a pan, snip you a handful of fresh chive leaves, open the cupboard door for the rennet, and...and...

The rennet! She ain't there! She's nowhere to be found! In fact, you're plumb out! Now you recall: you used the last rennet tablet to make some custard Sunday afternoon--to celebrate the first asparagus stalk of the season.

Oh, well. Rationally, you say: "Big deal. So I'll have cottage cheese with chives next week." But it's too bad these little irrational pleasures won't wait around for you like that, eh? So you go out and chop stumps instead.

Yes, folks, it can be very frustrating to run out of rennet (or anything else, for that matter) when the nearest store is 20 miles away. Because if you use a lot of milk, as we do (four does can really crank out the ole lactic fluid, let me tell you!), you'll find that rennet is well-nigh indispensable...because plain old unadulterated milk can get mighty boring when you've got four gallons of the stuff glowering at you from the back of the refrigerator, while gallon after relentless gallon keeps flooding in every 12 hours, like clockwork.

And rennet, sadly, is easy to overlook once you've immersed yourself within the cavernous depths of your average mega-grocery. It comes in tiny boxes, and if it's not on your shopping list (and we never use a shopping list), you're never going to stumble across it the way you will oranges or hamburger.

(Actually, though, it's not such a tragedy to run out of rennet. After all, you can always turn your milk into yogurt, or put a spoonful of honey into a glass of the white liquid and pretend you've got a milkshake.)

But the point I've been building up to all this time is (are you ready for this? Are you sitting down?): I've got good news for all you forgetful cottage cheese lovers (and custard junkies) out there--YOU'LL NEVER HAVE TO WORRY ABOUT RUNNING OUT OF RENNET AGAIN! Because chances are, there's a natural rennet substitute growing wild...right in your own back yard! (Or down the road for sure.)

This wild rennet substitute is called cheeseberry (though some people call it "horsenettle"). Cheeseberries (*Solanum carolinense* in the eastern U.S. and *Solanum elaeagnifolium* in the West) are related to the tomato--the plants, which grow anywhere from 1 to 3 feet high, have grayish leaves, and usually have hundreds of tiny thorns along the stems.

The "shooting star" shaped flowers, which are present from early summer until fall, are larger, more colorful replicas of tomato flowers--the western species features bright yellow centers surrounded by purple rays.

But it's the berries that make the plants unmistakable, especially in the fall when the leaves have fallen off--they're about 3/8" in diameter, bright yellow, and look like tiny tomatoes...which isn't surprising, considering the close relationship between cheeseberries and that favorite garden fruit. Unlike tomatoes, however, the cheeseberry is mostly skin and seeds, with no pulp to speak of.

I recall that when I was a kid in suburban Virginia, I saw cheeseberry plants growing wild in vacant lots, and remarked to myself, "Hmmm, those berries look just like miniature tomatoes!" Years later, I noticed them growing around our Ozark homestead. And they're one of the most pestiferous weeds here in my present New Mexico garden. So I'd imagine cheeseberry has pretty much a nationwide distribution.

We first got the idea of using cheeseberries as a rennet substitute from the book, *Edible Native Plants of the Rocky Mountains*, by H.D. Harrington. Here is his description:

"*Solanum elaeagnifolium*, commonly called 'white horsenettle' because of the silvery leaves, grows in this area. Its berries were used by the Indians to curdle milk and Young gave a recipe for the process.

NAVAJO COTTAGE CHEESE

2 white horsenettle berries (fresh or dried)
 1 quart goat's milk

Crumble the berries into the milk. Boil 5 minutes or more. Drain and season. Eat at once."

"When we try to pick out anything by itself, we find it hitched to everything else in the universe."

Edible Native Plants of the Rocky Mountains by H.D. Harrington, Illustrated by Y. Matsumura, The University of New Mexico Press Copyright 1967



NIGHTSHADE (*Solanum nigrum*)
The Cheeseberry is a sister species of nightshade with "silvery leaves"

Well, that recipe looked so quick, and so easy, that we could not resist trying it. So we tried it...and it works!
(At this point some people might be asking, "Are you sure it's safe? Those solanums can be awfully poisonous, you know...consider Deadly Nightshade and her dread sisters!" To which I would say, (a) Well, if the Indians ate it, then it's probably safe, since they had thousands of years to find out one way or the other, (b) One of our goats can eat hundreds of the berries in a single afternoon without any ill effects whatsoever. Of course goats and humans don't have the same type of digestive system, but I'm sure it's reasonable true that what's safe for one is safe for the other and (c) It's best to play it extra safe and use only dry berries.)

Now it's time for some recipes. (Assuming you've been able to find some cheeseberries. of course. Probably the most likely spots would be roadsides or ungrazed fields. Just keep looking--they're probably growing around there someplace...and besides, it's a good excuse to soak up the countryside.)

BASIC CURDS and WHEY (Little Miss Muffett would go ape over this one): Merely use the "Navajo Cottage Cheese" recipe above. For a smaller batch, a single berry in a pint of milk works just fine. (You can avoid chesseberries in your curd by crushing them into a tea ball, which you then suspend in the milk.)

After you've boiled the milk/berry solution for about 5 minutes, the curd will separate, forming a white, spongy mass on top of the liquid whey. When this happens, spoon out the curd and set it in a tea strainer or onto a piece of cheesecloth so that any excess whey can drip out--this forms a firmer, drier, more aesthetically pleasing curd.

DON'T THROW THE WHEY AWAY--it might not look like much, but it is packed with nutrients, so try adding it to bread, or to any recipe which calls for sour milk or buttermilk.

Meanwhile, back at the curd, you could always salt it and eat it directly out of the cheesecloth, as I usually do when I'm hungry. Or use it as a base for chip-dip or salad dressing. How about mixing it with peanut butter and creating a Jimmy Curder sandwich? Or on a less political level, milk curd could probably be substituted for tofu in many cases...it's certainly worth a try.

Personally, I prefer **COTTAGE CHEESE**. Essentially, cottage cheese is merely "sour curd." (The Little Miss Muffett curd I've just described is "sweet curd," made from regular milk.) To make sour curd, you need sour milk, but you can't just let your milk sit in a warm place till it turns sour. What you need are the right bacteria, and you can get them from a store-bought quart of buttermilk. (Keep that buttermilk ice cold in your fridge, and it will last for weeks--long enough to make plenty of cottage cheese)

To make cottage cheese, mix 1 3/4 cup of sweet milk with 1/4 cup of buttermilk, and let the mixture sit at room temperature for a couple of hours...this gives the buttermilk bacteria time to do their work. Then, proceed exactly as outlined above. The resulting curd will be a dead ringer for honest-to-god cottage cheese, and tastes great when lightly salted and sprinkled with fresh chives.

If you get a yen for something sweet, you can try **CHEESEBERRY PUDDING**. Mix together a pint of sweet milk and a tablespoon of honey. Heat slowly until the honey dissolves. Add 1 crushed berry. Simmer--do not boil--until thick. By not boiling, you create a mushier curd with the texture of pudding, which is exactly what you want. Flavor this pudding-curd to taste. I think the best way of all would be to open a fresh jar of strawberry preserves and dollop about six heaping spoonfuls of that sweet delight all over the curd. Of course, blackberry jam would also be acceptable.

My stomach is starting to rumble, so I'd best end this article. Because it just occurred to me that we've got a pint of **FIG PRESERVES** (with lemon peel!) in the pantry. And there's a quart of milk sitting on the porch roof (our energy-free winter refrigerator). And next to our grape arbor there's a big old cheese-berry plant covered with ripe berries. So I guess it's time for a little snack.

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POETRY

Santa Fe

cold	november	dawn	in
the	distance	the	mountains
called	<u>sangre</u>	<u>de</u>	<u>cristo</u>
the	blood	of	christ
in	the	dark	cathedral
the	priest	intones	the
ancient	ritual	'take	eat
this	is	my	body'
in	the	plaza	they
of	the	pueblo	wait
blankets	drawn	tight	against
the	winter	wind	and
we	who	have	heard
the	church	bells	of
our	lady	of	paris
drunk	wine	along	the
arno	seen	the	sun
rising	over	the	towers
of	the	city	on
the	thames	turn	away
from	plazas	&	cathedrals
from	the	memories	of
dawn	upon	some	golden
strand	from	that	deep
silence	clean	and	pure
along	the	mountain	rim

By: L.S. Fallis, Las Cruces, NM

Tuesday noon. October.

Tuesday noon. October.
the locust branch tips
yellow. gray sky

like a mighty roof
enclosing all the space
between the Organ Mountains

and the western mesa.
river valley fortress.
desert temple.

floor of creosote and clay.
the horn toads
in their kivas

wait for rain

by Joseph Somoza
Las Cruces, New Mexico

The wild mountainside
screaming
raped and abandoned
by crazed human domain
those leisure-lovers rolling along
in winnebago dreams.

Rubber thunder hooved
Silver in the hand in the tomb
it's a deadman's wilderness here.

If only I had been one
of those blessed to find this terrain
unspoiled
without the curseful comforts
known as civilization.

By: 1977 Linda Tasch ©
Las Trampas, NM

Gordon Solberg



My New Mexico

This country of expanse.
 Black shadows of cattle.
 Green plain in October after the rains.
 The red rock that solid
 Can't shake or be shook.
 The scrub oak thick and gnarled.
 Laying in roots that hair by hair seek
 the earth between crevices
 For a thirsty trunk big around as your wrist.
 Here, God lives.
 His blue sky, white cloud.
 His green tree, purple aster.
 His air that cleans the hair of the nostrils.
 His arroyo dry but carved out by His
 moisture.
 His blue and white icy lake of water we
 tap beneath the rock to drink.

by Stanley Berne
 Portales, New Mexico

(Stanley Berne has recently written
Future Language published by Horizon Press,
 N.Y.C., 1976)

For three hundred years
 the Virgin smiles on Las Trampas
 this valley of boot trails
 paths of Conquistadors and Padres.

It was here young farmers
 came home
 to till the clay
 hands crusted sweat
 it sprang green with life.

Homes of earth walls braced with timber
 shared their roof
 with poets and desperados
 and her smile.

In the great mountain's power spot
 moves the cleansing creative force
 slipping over needle peaks
 from out across deep deserts
 a fragile alpine flower
 budding in my hand.

by Linda Tasch ©
 Las Trampas, New Mexico



Cañada Corrales

Sacred, in dry country, every stream.
 This, from Atalaya, down a black sill
 Of outcrop marble, carved at the rim
 A bowl for flesh to bathe in Eden's truth:

Chest-deep, worn for two, female, male,
 Chastened in cool water and close stone,
 Rippled through the clear to harvest miles
 Of rock and canyon, sky and valley pine.

Until a new buyer made a cement dam
 For a swimhole, crazed the gradient;
 The first flash-flood brimmed rock and all
 With gravel, where shoal water slides.

Forcing nature is our life and death:
 Oedipus plows the mother, to their pain;
 A risk with love and knowledge; wanting both,
 Defiance flung to the boomerang.

by Charles G. Bell
 Santa Fe, New Mexico

New Mexico Mountain Climbers

The man, the one carrying
 the binoculars, with his wife,
 standing in the path that the Forest Service
 scissored out between the young pines,
 asks if there is an easier way
 to climb the mountain which breaks
 into the blue shell of sky, as if
 the blue were also the cream of an egg
 that covers the backs of the climbers,
 now more than half-way to the top,
 their bodies and their tools
 fastened to the rock-flesh of their obstacle.

BY: Michael Seidenstricker
 Philadelphia, Pa.

The Sierran covers environmental matters in New Mexico and El Paso, Texas. We are interested in poems about nature, man's relationship with nature, and environmental problems. Poems about Southwestern country, wild life and flora are especially desired.

If you are interested in sharing your poetry, send copies and a self-addressed stamped envelope to:

Rio Grande Sierran
 Poetry Editor
 338 East De Vargas
 Santa Fe, New Mexico 87501

Environmental Toxins & Your Health

BY: NINA ROBBERN

A practical guide to increasing health through the avoidance of environmental pollutants is an eight week course called Environmental Toxins and Your Health. Offered January to March by Continuing Education of College of Santa Fe, the course will focus on the presence of pesticides in our air, food, and personal effects.

With the increase in what chemical industry refers to as "non-pesticide uses" of pesticides, there is more to worry about than the air we breathe or whether we are eating organically produced foods. Hundreds of non-food items which are part of our daily existence are also permeated with pesticides. These chemicals - employed by industry in the manufacture of such items as clothing textiles, paper, shampoos and soaps, building materials, and electronic devices to name a few - are highly toxic to mammals and take their toll of human health.

How they affect our health and how to recognize a "pesticide reaction" has been the concern of a national group of physicians with which the instructor has been working. One of their project aims is to determine levels of human sensitivity to pesticides which are residually present in the general and personal environment. By eliminating, as much as possible, exposures to pesticides, these doctors - whose specialties range from pediatrics to psychiatry - have cured once hopeless cases of a wide range of ailments; from hypoglycemia and arthritis to psychiatric cases scheduled for lobotomy.

We Santa Feans are living in a region of relatively uncontaminated air. By excluding pesticides from our personal environments, the health and well being of every person can be enhanced.

The instructor, Nina Robben, has devoted seven years to field investigation of the pesticide contamination of general and personal environments. Much of this research entailed on site investigations of chemical agriculture in four diverse farming and forestry regions of California, Oregon, Washington, and Nova Scotia, Canada. The latter four and a half years were spent camping out in wilderness regions and included visits to 46 states and lower Canada.

Recent work includes the adaptation of pesticide materials for human testing and a book which offers guidelines for researching organic food sources.

Under the auspices of the Ecological Land Conservation Co-op and the Environmental Research Foundation of California, she has given seminars on this and related subjects. She recently spoke before the Society of Clinical Ecology, a national group of physicians concerned with chemical hypersensitivity, at their annual conference in San Francisco, California.

The course's eight 1 1/2 to 2 hour sessions are:

- I. WHY PESTICIDES ARE THE FOCUS OF THIS COURSE
- II. HOW PESTICIDES AFFECT OUR HEALTH: mechanisms of affect and a discussion of petrochemical sensitivity - how it is caused and how to prevent the development of susceptibility
- III. AIR CONTAMINATION: rural, urban, and domicilliary and guidelines for discerning levels of contamination in all three
- IV. WATER CONTAMINATION: rural and urban and guidelines for determining contamination levels
- V. FOOD CONTAMINATION I: Avenues of pesticide contamination in food pre and post harvest and what chemicals to expect in any one food category
- VI. FOOD CONTAMINATION II: How to research organic Food sources, which foods are the safest, brand names you can trust.
- VII. PERSONAL EFFECTS CONTAMINATION: Direct treatment and incidental contamination of manufactured products, non-pesticide uses, why we should avoid pesticide related chemicals.
- VIII. THE ALTERNATIVE: A PESTICIDE AVOIDANCE APPROACH TO LIVING: A case study of one family who practiced complete avoidance, detoxification of the personal environment - a discussion of alternatives to pesticide contaminated articles within the home.

The course begins January 19 at the College of Santa Fe. Classes are scheduled Thursdays, 8:00-9:30 p.m. Tuition is \$40. The course can be accredited at the rate of 1 credit for every 10 hours of class time. Interested parties may contact the Center for Continuing Education 982-6295.

FLASH!

THE RIO GRANDE EXECUTIVE COMMITTEE RESULTS

The Chapter Election Committee (Howard Adelstein, Betsy Fuller & Ingrid Volnhofer) submit the results of the balloting for Executive Committee members and the bylaw amendment.

Elected: Ken Adam
John Gavahan
Phyllenore Howard
Jim Stewart
Ted Zobeck

Amendment passed 75 votes for
8 votes against

Eighty-seven ballots were cast and counted. Three were in unsigned envelopes and were not counted.

CHAPTER DIRECTORY

The Sierran is not always able to get up to date reports of what is happening in the local groups. If you want to know what a groups activities will be, don't hesitate to call the chairperson.

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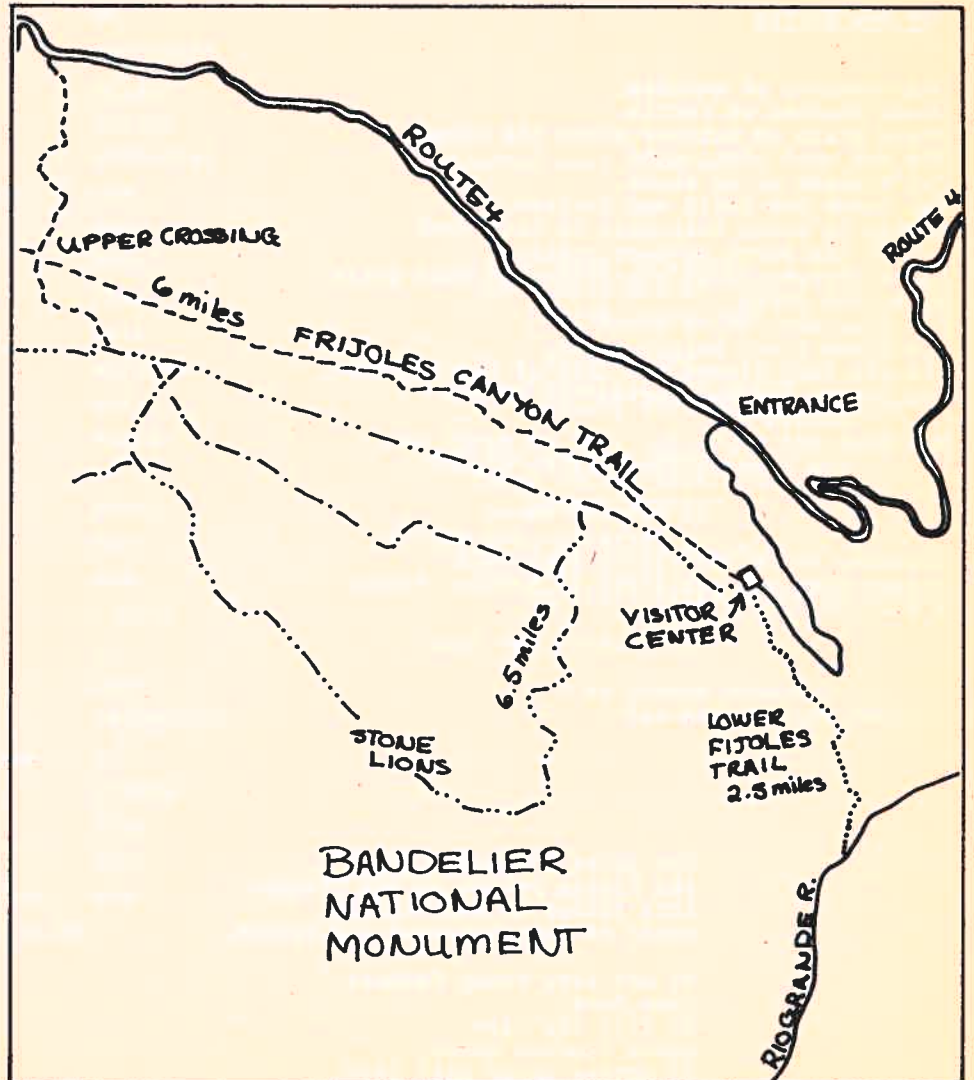
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Ted Zobeck
915 University Ave.
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A WINTER HIKE



TWO HIKES IN BANDELIER NATIONAL MONUMENT

Bandelier National Monument Visitor Center may be reached by taking Route 285 north from Santa Fe and then Route 4 towards Los Alamos; but keep left before Los Alamos and go through White Rock until you come to the road on the left to the headquarters.

Get a permit at the Visitor Center and they will show you the place for hikers to park, across the "Rito de Las Frijoles." Both hikes start from here. Probably the best winter hike is down the southeast trail. This delightful path follows the stream, and passes two spectacular water falls (for your own safety stay at the top of the falls). It is 2 1/2 miles to the Rio Grande, which you can happily explore in either direction. You may perhaps find some green plants in this more benign climate. Remember that the trip back up the steep trail will take more time and energy!

The second trip, starting at the same place, goes up Frijoles Canyon to the northwest. You may already have visited the Tyvoni Ruins near the Visitor Center, and perhaps would like to climb up the ladder to the Ceremonial Cave, which is indicated by a sign on this trail. Farther up the trail hops back and forth across the stream, often between steep rock walls in a stunning variety of shapes and colors. As you gain altitude the character of the trees will change. The summer wildflowers will be missing, but there is no lack of beauty! Turn back when you feel like it. The six miles (twelve round trip) to the upper crossing may be too much.

Neither hike should be done under icy conditions, and be sure to wear sturdy hiking boots, and warm clothes. Bring your own canteen, as the stream water is not considered safe.

NEWS NOTES

EPA Administrator Douglas M. Costle has ordered a halt to sales and use of the pesticide DBCP, believed responsible for causing sterility of reduced sperm levels among more than 100 workers who have produced the pesticide in Alabama, Arkansas, California and Colorado.

DBCP (dibromochloropropane), used in this country since 1955 to control destructive round worms in the soil of numerous crops and in home lawns and golf course turf, is also suspected of being a human cancer agent, based on its causing stomach and mammary tumors in laboratory rats and mice, Costle said.

"DBCP poses an imminent hazard to the public and to farmers and other persons who apply it," Costle added. He noted the calamity "again dramatizes the need for vigilant, reasonable regulation of chemical production and use."

from New Mexico Environment vol. 2 number 4 Oct. 1977

In its annual report to Congress on air pollution prevention, EPA states that atmospheric levels of particulates(dust) have been reduced 4 percent per year since 1971, "resulting in 33 percent fewer Americans breathing dangerous levels of the pollution in 1976," said EPA news release. The report said levels of sulfur dioxide have been cut 30 percent in urban areas from 1970-1975

"Although levels of photochemical oxidant (smog), carbon monoxide and nitrogen dioxide have not been monitored as long as the other pollutants--making national trends difficult to establish--encouraging evidence suggests progress has also been made in varying degrees in reducing levels of the contaminants," EPA's news release stated.

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ADDRESS CHANGES for Sierra Club members should be sent to Sierra Club, 530 Bush Street, San Francisco, Ca. 94108 ATTENTION: Membership Services.

The Rio Grande Sierran is grateful for the facilities that the Central Clearing House makes available for our use.

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