Environmental Justice

The environmental justice movement has grown in recent years as groups traditionally left out of environmental issues have criticized the disproportionate ecological burden placed on many low-income communities and minority groups. Environmental justice is defined as the “fair treatment and meaningful involvement of all people regardless of race, color, nationality, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” In other words, environmental justice seeks to protect social groups that may be faced with unfair negative environmental consequences due to certain economic activities or government policies. It also encourages the opportunity of all people in a community to participate in decisions about activity that will affect their health and environment. One of the most important aspects of the environmental justice movement is not redistributing the negative impacts of environmental degradation across more proportionate economic and racial lines, but to prevent those dangers from developing in the first place, so that no one is exposed to such injustices.

As the environmental justice movement gains ground in the United States, an increased focus is being placed on race and its involvement in discrimination towards environmental issues and policy. In 1987, the United Church of Christ Commission for Racial Justice published a study *Toxic Wastes and Race*, that found patterns existing in American society threatening minority communities disproportionately with the locations of hazardous waste sites. This study revealed the discrimination embedded across the nation of racial segregation in environmental policy-making and targeting people of color to bear the burden of waste and toxicity. Environmental racism extends beyond the

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unequal environmental burden placed on minority communities to the exclusion in policy-making when it comes to environmental topics.

**Agricultural Workers**

An important indicator of the racism in American economic and social systems towards environmental issues is the condition of the farm worker. Ironically, the people that produce much of the food consumed in this country are themselves malnourished and suffer some of the most severe health problems and working conditions among any social group. Throughout history, American farm workers have come from many racial backgrounds including Chinese, Japanese, Mexican, black, Filipino, Haitian, and Vietnamese. The largest group is Mexican Americans, who are legal American citizens but are often stereotyped as illegal immigrants. Many face poverty from famine, war, economic disasters and other misfortunes that have caused them to leave their home areas looking for economic security in the farm labor industry of the United States. The estimated three million farm workers in this country can be described in two categories: the migrant worker and the seasonal worker. Migrant workers, largely populated in the southern United States tend to leave their homes in March and migrate north with the planting season. They are generally employed for five months out of the year and suffer greatly for income during the slow winter season. The seasonal workers are employed much of the year in a single location, working on crops which require continuous care such as oranges and grapes. Seasonal workers have more stable employment than the migrant worker and are responsible for tasks such as irrigation and pruning and not just harvesting.4

There is a long history of immigrant minorities becoming involved with farm labor in America. In the late 1800s, Chinese immigrants who had been working on the railroad lines turned to agriculture after the railroad boom halted. Many Mexicans fleeing the 1910-1920 revolution also turned to American farm labor jobs. To minimize labor costs, agricultural businesses lobbied for national policies allowing an increase in the number of Mexican immigrants.5 After World War II Filipino and Puerto Rican immigrants were targeted as workers for the often physically grueling farm work. Workers receive relatively low wages, primarily due to the largely seasonal employment and job insecurities they face. Some crew leaders threaten to fire workers if they complain about wages or don’t work hard enough. Environmental variability such as drought will affect harvest yields and increasing technology for harvesting and processing produce also present risks for losing employment.

One of the driving forces of the poverty and horrendous working conditions of the farm worker is the structure of the agricultural system. Large multinational corporations that focus on food processing like the Campbell Soup Company are the dominant businesses in the American agricultural system.4 Migrant farm workers are recruited by labor contractors as temporary workers during labor-intensive periods like harvesting. These contractors often provide housing and transportation for the workers, serving as a

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5 Ibid, 25.
go-between for the workers and growers. This process can lead to abuse as labor contractors can deceive workers in practicing things like Social Security fraud in order to gain personal profit themselves. Some smaller, family run farms recruit migrant laborers for harvesting smaller-scale specialty crops. In this case, the nature of the individual grower has a great impact on the treatment of the workers. Some provide decent housing and wages, while others may outright exploit workers, reducing wages and subjecting them to severe conditions.

The History of Pesticide Use

Pest control had been an aspect of farming since the beginning of agriculture but it wasn’t until the introduction of DDT after WWII that serious health risks were documented. The common practice of pesticide use reflects certain attitudes that American society holds towards nature. Although pesticides were initially welcomed because of increases in food production, their use also suggests the domination over the land that society embraces. The object of killing pests that are a potential threat to food production reflects the ultimate goal of controlling the landscape completely. By the 1960s, pesticides were considered essential to modern farm practice, with over $1 billion spent annually by 1969 on pesticide expenditures. Universities and chemical companies worked hard to develop new chemicals as some pests were becoming immune to certain pesticides.

Since the beginning of the environmental justice movement in the United States, pesticides have been recognized as a threat. Farm workers commonly exposed to dangerous pesticide use face increased health problems due to such exposure. It is estimated that 300,000 farm workers are exposed to pesticides each year. Most pesticides affect the nervous system, behaving like the nerve gas used in military conflicts. Many herbicides and insecticides are cancer-causing agents and can also lead to birth defects. A publication from the University of California-Davis Pesticide Farm Safety Center reported that chemically dependent agricultural production is just as dangerous to workers’ health as mining. Some chemicals used for fumigating fields and storage facilities are meant for killing mold, insects, and mice. Produce is exposed to such chemicals and people that consume the food are at risk for contacting pesticide residue. But the workers that handled the food are exposed to such contaminants at hazardous levels. Malnutrition, chronic diseases like diabetes, back injuries, respiratory infections and dental problems are common health problems among farm workers. A 1983 survey of Midwestern tomato workers interviewed Mexican American male heads of households and found 21% of the sample had been sprayed with pesticides more than ten times during the work season of 1983. Of this sample, 97% were estimated to be in

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need of medical attention with abdominal sickness, persistent flu, prolonged weakness, thyroid trouble, and deafness or ear trouble.⁹

Considering the importance of pesticides to agribusiness and in ensuring a surplus harvest, the government has done little over time to protect farm workers. The lack of attention paid by the federal government to workers is reflected in early legislation. In 1910, the Pure Food and Drug Act was passed to protect consumers from poisonous foods. The Federal Insecticide Fungicide Rodenticide Act passed in 1948 was created to protect growers from misrepresentation involving the use of chemicals on farms. It wasn’t until 1969 that hearings were first held to consider federal regulation of worker exposure to pesticides. In these hearings, the California Department of Food and Agriculture (CDFA) required commercial sprayers to obtain a permit before applying an “injurious material”; to file monthly reports detailing pesticide use, and to conduct sampling that would analyze food for toxic residues.¹⁰ Another hearing required growers to inform workers of the potential dangers of working in a field that had just been sprayed, but did not prohibit workers from entering the contaminated fields. The CDFA claimed to help workers by the publication of a bilingual booklet that would explain how to reduce “human error” and the precautions workers should take when spraying. But this method of educating workers was highly ineffective as growers still held the great majority of power and demanded work to continue, even if it occurred in a contaminated field. Reports of health problems due to chemical exposure were still largely undocumented in the 1960s, as workers may have been fearful of punishments from the labor contractor or grower if they claimed workplace hazards, workers were unfamiliar with the system, or health care was difficult for minority groups to obtain.

Taking Action

As awareness about the pesticide dangers to workers grew slowly over the next decade, in 1967 the Environmental Defense Fund was formed by a group of lawyers, scientists, and others interested in ecology in the New York area. The EDF filed suits that banned DDT in Michigan, Wisconsin, and ultimately nationally. Another environmentalist group that approached pesticide action was the Sierra Club, who opposed spraying pesticides in Yosemite National Park. In general however, the Sierra Club was reluctant to change pesticide use though, as the group felt the public was not well informed and that policy-making on chemical use should be left to the experts. Included in the Sierra Club were members who supported pesticide use, such as Thomas Jukes who worked as an engineer for a chemical company.¹¹ This apparent contraction made passing anti-pesticide policy a difficult issue in such mainstream environmental groups.

The United Farm Workers’ Organizing Committee (UFWOC) was formed in 1966 and combined petitions through lawsuits and administrative action with boycotts and contracts to further the issue of pesticide dangers. Legal activism pressed for services

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¹¹ Ibid, 88.
for workers, means of supporting the union, and improved labor laws and working conditions. As pesticides became a liability for farm owners because so many workers began reporting symptoms, the UFWOC exposed this vulnerability to the advantage of the workers. Two types of lawsuits were filed: those that sought to change the procedures that pesticides were used in and those that attempted to ban certain chemicals altogether.

In 1968 the UFWOC called for a detailed record of each pesticide treatment: when, where, method of application, weather conditions, and who sprayed it. They also requested that the court impose a mandate of three days notification by the grower before a poison was sprayed, in both Spanish and English. The judge of Kern County Superior Court in California ruled against such requests, as he didn’t see how the information would be helpful to the Union and would hamper cooperation between grower and worker. After several cases came before the court of sick farm workers with mysterious illness, the judge this time acknowledged the public right to information about pesticide records and made these reports public documents.

Another strategy of the UFWOC was the boycotting of certain produce exposed to pesticides. With the help of Marion Moses, a volunteer nurse who had witnessed the sickness associated with pesticide exposure first hand, the union brought to the public’s attention the problems associated with pesticides and fieldwork. Although the campaign portrayed the dangers workers faced, it also made sure to educate consumers about potential residues on their produce with signs that read slogans such as “California grape workers are killed and maimed every year by the pesticides you are eating. DON’T EAT GRAPES”. Such information targeted the large consumer group that were at risk of pesticide exposure and educated the public that farm workers were not the only group affected. This was in the hope that if the public continued to ignore the health dangers facing migrant workers, they were ignoring their own personal health as well. The boycotts pressured growers to agree to contracts that protected workers’ health. The campaigning done by the UFWOC was important in advancing the right of migrant farm workers in California and brought about awareness concerning the connection between social groups dealing with injustices and the environment. Ultimately a new contract was constructed in 1970 that gave workers far more rights, including the right to be excused for union business, job security, leave of absence and vacation pay. The health and safety clause of the contract sought to protect workers from pesticide abuse, provide access to information, and protect workers that disagreed with management. The contract was not able to prevent poisoning or chemical spraying but hoped to ensure decisions were made that had the worker’s best interests in mind and based on the best available information. Action against pesticides was only a part of the Union’s activities in gaining rights for farm workers but was instrumental in exposing the dangers workers face.

Today several nonprofit groups across the country work to improve the living and working conditions of migrant and seasonal farm workers. The Farmworker Justice Fund focuses on immigration policy and welfare, legislative measures, occupational safety and health as well as access to the judicial system. In 1996, FJF became part of National

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Council of La Raza, America’s largest Hispanic civil rights organization. To improve the power of farm workers, FJF trains lawyers and paralegals about agricultural employment policies and publishes material about the abuses workers face. Current projects include: pressing the Environmental Protection Agency to protect the health of farm worker families under the Food Quality Protection Act, participation in the Workplace Safety Initiative (a group of labor unions, NGO’s, and corporations to reduce workplace injuries and illnesses), and a public campaign against a new program that would bring several thousand agricultural workers into a “guestworker” status that would reduce working conditions because of their temporary resident status.

Turning to local organizations, the Maine Rural Workers Coalition, now located in Lewiston, Maine started at the Decoster Egg Farm in Turner. In 1996, workers began to appeal for improved working and living conditions. The managers of this particular farm had a long history of recruiting and exploiting non-English speaking people, particularly Vietnamese, Hispanic, and Czech workers. Workers often worked more than 100 hours a week without overtime pay. Threats and intimidation among workers were also a danger in the workplace.

Workers felt that they needed to organize a group to help fight the injustices migrant workers faced not only at the Decoster Egg Farm, but also across the state in various agricultural businesses. Since promoting programs that help workers develop leadership skills and support each other, protecting their health and rights, conditions have improved. After inspections by the Office of Safety and Health Administration in Turner, the Decoster Egg farm was fined hundreds of thousands of dollars for health and safety violations.

An important aspect of the mission of the Rural Maine Workers Coalition is also to build respect for and celebrate the multicultural nature of rural workers. With the help of Saint Philip’s Catholic Church in Auburn, Maine, the organization has solicited help on the community, state, and national levels, as well as attention from the media. Volunteer attorneys donate their time to helping the organization achieve the goals set out to help serve the workers, such as suing the Decoster farm for overtime pay for hundreds of employees. In 1999, the organization started an eye clinic for rural workers and their families together with the Lewiston Housing Authority and doctors from Saint Mary’s Hospital. Recently, a language-learning program began, pairing English and Spanish speakers with translators, helping to learn each other’s languages. Another important goal of the organization is to educate workers on their health and safety issues, including environmental issues such as pesticide exposure and chemical awareness.

Since the founding of Maine Rural Workers Coalition in 1996, the office has expanded from Auburn to Lewiston where many workers now live. Since the Decoster battle Jose Soto, a volunteer leader, and his team have branched out to include all rural

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workers in Maine, including blueberry, broccoli and apple pickers, fishery, and forestry workers, many of whom are Hispanic. The office largely depends on volunteers, as farm workers work long hours and then have little time to participate in daily activities of MRWC. Over 50 individuals volunteer their talents on a regular basis and a 15 person Board of Directors, mostly who are bilingual, hold weekly meetings determining progress and future goals of the organization.

One aspect of the MRWC, the Chemical Awareness Program, focuses on researching what chemicals and pesticides are being used on Maine farms and what the health and environmental risks are with such chemicals. In the past, Maine Rural Workers Coalition has provided training seminars on chemical safety at locations where pesticide use is frequent. The Program also attempts to get employers to use means of pest control other than harmful chemicals. In the past, the director of the Chemical Awareness Program has visited farms throughout Maine, determining exactly what practices are being used in terms of pesticides and workplace safety.

**Regulation**

Perhaps one of the most important matters concerning pesticide safety is the management, record keeping, and reporting requirements that agricultural producers, pesticide dealers, and spraying firms must maintain. The Department of Agriculture’s Board of Pesticides Control released a chapter in August of 1985 describing such regulations. From a period of two years after application, commercial farmers must maintain records of the chemicals used, site information, detailed application information including EPA registration numbers, active ingredients, pesticide brand name, weather conditions, ventilation requirements, and the names of all those individuals that assisted in the application process. Annual summary reports must be filed with the Board of Pesticides Control at the time when licenses must be renewed detailing the area treated, pest name and the amount of pesticide used, and the EPA registration number. Additionally, pesticide vendors must provide the Board with a yearly report of total sales before their pesticide dealer license can be renewed. Finally, it is required that commercial agriculture businesses, spray contacting firms, and licensed pesticide dealers report and instances of spray incident. A spray incident is defined as “any significant misapplication or accidental discharge of a pesticide” including fires, vehicle or aircraft accidents, application to the wrong site, and any equipment breakage or malfunction in during the handling of pesticides.

The state of Maine Board of Pesticides Control and the Maine Emergency Management Agency published a “Guide to Understanding the Reporting Requirements of the Maine Emergency Planning and Community Right-to-Know Act” in March of

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18 Department of Agriculture, Board of Pesticides Control. Ch. 50: Record Keeping and Reporting Requirements, Section II.
19 Ibid, Section III.
1993. The guide includes easy-to-read sample incident report forms, transportation logs, storage records, and how to interpret the labeling information.

**Education**

Often the people most affected by the chemicals sprayed on our food are the individuals who are the least informed about the dangers of pesticide use. The Environmental Protection Agency has published many documents as well as training cassettes, videos, and posters within the last ten years in multiple languages to hopefully try and educate all those potentially affected by pesticide use from migrant farmworkers, to small suburban gardeners to the average American consumer shopping for produce. By training fieldworkers in pesticide handling and safety the chance of dangerous exposure is decreased. Important educational measures include awareness of:

- Routine decontamination (washing clothing and materials exposed after every use)
- The posting of warning signs in areas affected and obedience of restricted entry intervals in sprayed fields.
- Where pesticides can be found (residues on clothing, through drift)
- Means in which pesticides can enter the body.
- The possible infections, both chronic and delayed effects as well as signs and symptoms of pesticide exposure.
- How to obtain treatment when necessary; improve access to treatment, basic first aid knowledge.
- General training sessions providing workers with details of the above information.

Such information is easily available through websites, State government programs, and in publications in recent years regarding workplace safety. However, the challenge facing groups like the Maine Rural Workers Coalition is how to get that information out of the computer or book and more directly to the workers, many of who do not speak English. The former director of the Chemical Awareness Program for the MRWC ordered brochures about the “terror invisible” of pesticides in Spanish and the office owns several cassette recordings from the EPA to aid in training for chemical awareness. One of my tasks was to update much of this information and get it into a friendly version for the workers who often spend a great deal of time in the office. I also made a poster and brochures in both Spanish and English so that the workers would be more likely to encounter safety information as opposed to overlooking the large books and printed packets the office has on file.

**Chemical Free Farming**

The Centers for Disease Control report instances where despite adequate posting of signs, many works still enter fields before the designated restricted entry level has ended and become ill.20 Members of the Pesticide Action Network and United Farm Workers of America agree that notification measures are inadequate to protect

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20 Margaret Reeves, Kristin Schafer, Kate Hallward, Anne Katten, *Fields of Poison California Farmworkers and Pesticides* (California: Pesticide Action Network, 1999) 34.
farmworkers rights. In addition to education and notification of chemical dangers, in regards to the larger picture of long term agricultural practice is to phase out some of the more dangerous toxins and progress towards a more sustainable and healthy agricultural system in the state of Maine. Although I was most concerned with immediate education on the dangers and safety measures when working with pesticides, the bigger picture is really how to turn to more sustainable practices.

A major piece of legislation that helped to decrease dangerous pesticide levels in much of the produce consumed by Americans passed in 1996, the Food Quality Protection Act. It implemented enormous responsibility on the EPA to regulate the levels of pesticide residues in foods. This was a crucial step towards decreasing dangerous practices and increasing the safety of foods consumed. But how does this help farmworkers? It raises public awareness about the dangers of chemicals on the foods we eat and can encourage the practice of more sustainable agriculture, perhaps even enticing farm owners to consider organic farming and focus on safer, healthier produce and farming methods.

Biological controls such as introducing natural predators of the pests, such as bats, ladybugs, and mini wasps all disrupt aphids, mites, whiteflies, and hornworms. Another biological control is to introduce certain fungi, bacteria and viruses to attack insect pests. The use of biochemical pesticides has also increased recently due to better research and technology. By using pheromones and juvenile insect hormones, pests can be lured towards traps or away from plants and can interfere with a pest’s natural functions, growth, and reproductive ability.

Incorporating more ecologically sound principles into pest management not only ensures better protection for the field workers but can “strengthen individual impacts of strategies when used together, reduce risk of crop failure by distributing the burden of crop protection, slow the rate at which pests adapt or evolve resistance, and reduce operating costs and improve profitability”. By controlling certain practices such as harvest, fertilizer application, tilling, and pesticide application can avoid stimulating many pests. Perennial plants serve as an important habitat for beneficial insects and preserve soil quality by keeping extensive active roots below the soil and plant cover above. Also, increasing crop diversity can reduce pest problems by confusing organisms as they “encounter a broader range of stresses” across the landscape, seasonally, and from year to year. The EPA has established an integrated pest management (IPM) program that relies on a combination of environmental and worker friendly practices, many of which are included above. It uses pest monitoring and prevention to hopefully avoid the last resort that is pest control- including trapping, weeding, pheromone spraying, andLastly pesticide use. Such information is perhaps best targeted at farm owners, encouraging the benefits of more sustainable practices to ensure the safety of both their field workers and buyers. But it is important for farmworkers to know that there are safer

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methods for pest management out there and with some education, awareness, and activism, instances of illness in the workplace can be lowered with the incorporation of healthier, more sustainable practices.

**Lessons Learned and Future Work**

Some of my frustrations, and I’m sure Jose had many similar concerns, were mainly logistical. The office is in Lewiston, I don’t have a car. There weren’t always people in the office during the times that I was able to secure a vehicle which could be difficult on both our ends. The Sociology Department was very generous in paying for my gas every other week and I could sign out vans from the communication center on campus. In the times that Jose and I were able to sit down and talk (he is VERY busy), he was interested in why I wanted to be involved, often college students from various institutions contact him looking for a signature for a couple of community service hours worked. After I had established that indeed my intentions were to provide the office with some fresh resources regarding pesticide awareness, Jose asked me why I couldn’t just work for MRWC as the new director of the chemical awareness program (jokingly, I assume). If I had been a senior and not a sophomore this spring, I would seriously have considered it. Jose is adamant about young people getting involved in social movements and would be welcoming to Bowdoin students interested in helping MRWC.

There are always opportunities for students and volunteers to help the program in educational training sessions for workers who may be around pesticides. The MRWC is currently looking to hire a full time director of the Chemical Awareness Program whose duties will include:

- Continued research on pesticides used in Maine.
- Provide pesticide training to workers in the blueberry, apple, and broccoli fields.
- Attend monthly Board of Pesticide Control meetings.
- Follow legislative issues regarding chemical/pesticide use and reporting.
- Work closely with the Board of Pesticide Control inspectors to enforce violations.

Hopefully some of my research and resources for workers who don’t speak English will aid the new director of the CAP upon his or her arrival and at least give them a starting point and contact information for sources and organizations I found helpful.

An important project the MRWC has been working on this spring is the campaign for a living wage. In conjunction with several Bates students, MRWC supports an annual rally at the statehouse in Augusta. Throughout Maine, a living wage is around $11 an hour but half of the working class people in Maine are paid less than half of this amount. Many Hispanic workers in Maine fall below the official poverty line making only minimum wage that is barely enough to provide basic food, shelter, transportation, and health care for their families. Each year the Living Wage Campaign needs help in organizing the rally, making t-shirts, bumper stickers, arranging for speakers, and attracting various organizations to attend the rally advocating that Maine institutes a living wage for its working class. I was asked if I could get involved in long term planning but was just not able to this spring. Hopefully future Bowdoin students can be part of this motivational event and help to make a positive change in the lives of many workers, ensuring them a bit more stability. There are also volunteer opportunities
helping with the HIV/AIDS education and prevention program at the office. These programs always need help and Jose has worked closely in the past with many Bates students. Although transportation may be an issue, much of the basic research and creating booklets, t-shirts, brochures can be done outside of the office in Lewiston.

One of my other concerns in doing research for this project was on how to focus my work—whether to collect information for workers on chemical free farming or center my project on pesticide safety. After all, sustainable practices would keep workers out of danger from toxins in the first place. I did some research on chemical free pest management but decided ultimately that at least in the short-term farmworkers would be most benefited by understanding their rights and important safety information when around pesticides. A potential project for future students would be to attempt introducing chemical free pest management to farmowners around Maine as a way of ensuring worker safety. The MRWC is always in need of interested volunteers and is a friendly office where many workers spend their time, more really as a comfortable, relaxing space for them and less so as a formal office. I encourage students interested in agriculture, Hispanic culture and the migrant population, the working class of Maine, or human rights policies to contact Jose. Your Spanish will benefit as well!
Bibliography


Department of Agriculture, Board of Pesticides Control. Ch. 50: Record Keeping and Reporting Requirements, Section II.


