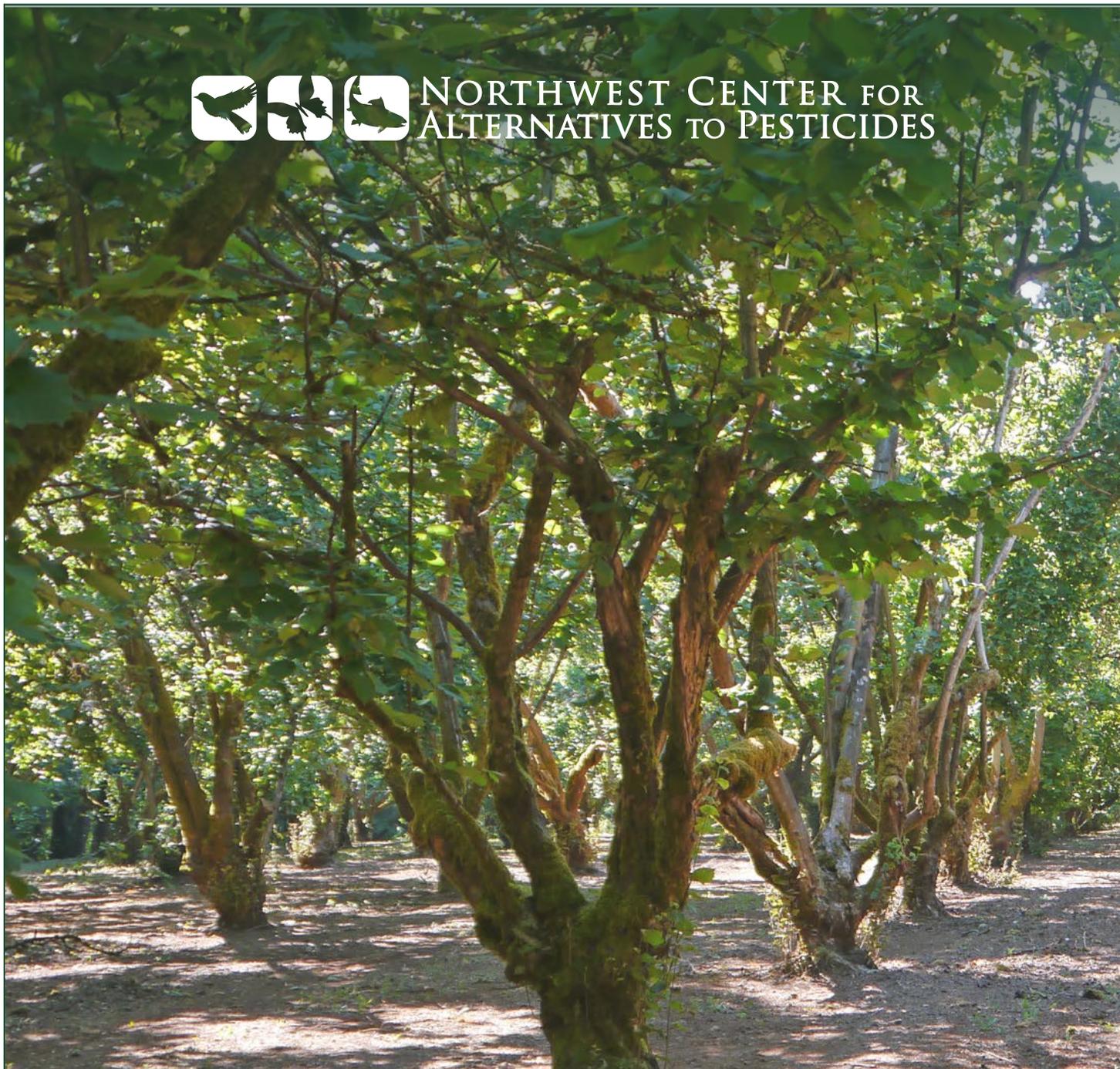




NORTHWEST CENTER FOR
ALTERNATIVES TO PESTICIDES



NCAP released 16 new resources this year on alternatives to pesticides and farm worker safety in the form of videos, factsheets and publications.

Cover photo from the video [Successes in Organic Hazelnut Production](https://pesticide.org/videos), available at pesticide.org/videos

NCAP AND YOU

Newsletter Year in Review: Vol. III (2020)

Thank you for supporting NCAP!

Year-End Reflections from Staff and Board

“If you have come here to help me you are wasting your time, but if you have come because your liberation is bound up with mine, then let us work together.” -artist and activist Lilla Watson

WHAT A YEAR! Through the ups and the downs, I am grateful to our community’s response and the mutual care we have for one another. This year it became evermore clear, as Lilla Watson states above, that our liberation is bound together and we must work together.

In 2020, NCAP and partners acted on the devastations of COVID-19 and racial inequality in our communities and partnered with allies to provide PPE, resource kits and COVID-19 testing events for the Latinx and farm working communities in Northeastern Oregon. We helped to raise COVID-relief money for essential undocumented workers in Idaho, sued the Department of Homeland Security for its indiscriminate use of teargas on protestors in Portland (see p.5) and we produced a record number of Spanish-language resource tools for self-advocacy from the harms of workplace and take-home pesticide exposure. This is only a short list of all the feats accomplished during this unforgettable year and I look forward to continuing our work together in 2021. **The ride isn’t over yet!**

-DOMINICA NAVARRO, Healthy People & Communities Program Coordinator

THE CLOSE OF YEAR 2020 also marks the close of my ten year term on the Board of Directors for NCAP. Over this period of time there have been many changes within our organization. **None have had a greater impact than those we have made this past year.**

I am excited to share with you that NCAP is in a strong position. The reason for this is the excellent performance of our staff with support from the board to meet the unique challenges of the year. With everything that came at us, it would have been so easy for staff to roll over and say “we can’t do it.” But they didn’t. They found many ways to keep us funded and carry out our mission and vision.

I am leaving the Board knowing that NCAP is poised and ready to address the challenges of the day and provide assistance to our communities. Thank you for your support.

-TONY BRAND, Idaho Board Member

AS I CONTEMPLATE the events of 2020, it’s easy to want to wash my hands of this year and leave it behind. But as the recent election has clearly shown, substantial change takes time. COVID-19, health disparities, pesticide drift, wildfires, tear gas – none of it is over. Hundreds of years of inequity and systems that value power and profit ahead of health aren’t going to change without sustained effort.

However, our values will keep us resilient and we can celebrate successes along the way.

This year people examined food systems, as links in the supply chain crumbled, and paid attention to the benefits of small, sustainable farms. They planted gardens, joined CSAs in unprecedented numbers, and met the farmers who grow their food. People also recognized the great benefits to our society that farm workers provide and engaged in policy efforts to provide farm workers a safe work environment. And people protested systemic oppression who had never protested before. **Thank you for being part of our community and supporting change for a healthier future!**

-ASHLEY CHESSER, Executive Director



Staff member Dominica Navarro at a drive-thru event providing COVID-19 testing, PPE and resource kits in Hermiston, Oregon



Farming Without Chlorpyrifos

by Ashley Chesser, Executive Director

I signed in and grabbed a seat in a room at the Oregon Capitol Building before every chair was filled and a crowd stood bunched up at the entry. For an action that should be pretty straightforward – preventing brain damage and cancer in children and farm workers – it remains a contentious issue. This was my second time testifying for a bill to ban the insecticide chlorpyrifos, and it wouldn't be the last.

As I waited my turn to speak, I listened to farmers share doomsday scenarios, including a grass seed farmer whose field was invaded by armyworms. He believed devastation would have been imminent without chlorpyrifos.

But I also heard the stories of farmworkers and families whose devastation was very real, due to the use of that chemical. One woman shared how she was exposed to chlorpyrifos while tending crops. She became ill and lost her unborn baby. A couple, joined by their bald six-year-old son recovering from cancer, shared the horrors their child faced after chlorpyrifos drift landed on him while playing in the yard.

In my testimony, I explained that NCAP hosts educational workshops to connect farmers and share knowledge about effective growing methods that do not rely on synthetic pesticides. Many farmers in Oregon and beyond already utilize cost-effective, ecosystem-based alternatives that reduce insect pressure without the use of chlorpyrifos.

These farmers choose ecological growing methods that focus on prevention, rather than using a chemical to kill a bug. I told legislators that in the case of the armyworm, farmers can use beneficial nematodes – tiny organisms that are mixed with water and sprayed into the soil – to eat the developing armyworm larva and prevent the worms from reaching maturity.

It's clear that resources, education and outreach are vitally important to empower farmers to choose healthier ways to grow crops. This is what NCAP's Healthy Food and Farms program is all about.

In the end, legislators walked off the job in Salem to prevent a climate change bill from seeing a vote. The rest of the bills waiting for a vote died, too. In Washington State, where NCAP provided written testimony and worked with a coalition of advocates, a similar bill was vetoed at the last stage due to financial concerns with the pandemic.

Thankfully, Oregon Department of Agriculture has taken up the issue in rulemaking and a near-ban is looking promising.

We will try again in Washington in the 2021 legislative session to ban chlorpyrifos, and we will continue to seek a federal ban in the coming years.

Many thanks to our supporters and allies who contacted their legislators and advocated for a ban this session!

People Are Not Pests

The role of pesticides in violence and racism

by Ashley Chesser, Executive Director &
Dominica Navarro, Healthy People & Communities Program Coordinator

Photo by Rob at Twenty200.com

After making a Black Lives Matter solidarity statement, NCAP received several responses asking us to “stick to pesticides” and environmental issues. So staff and board took time to reflect on the history of pesticides and reviewed the role of pesticides in violence and systemic racism.

PESTICIDE HISTORY

Herbicides and insecticides are so integrally involved in today’s food system that it’s easy to forget chemical pesticides were not originally designed for agricultural use. Early chemical fumigants were used in WWI to drive the enemy out of the trenches and shoot them with machine guns.¹ Later, the chemicals were repurposed for use against soil-borne pests.

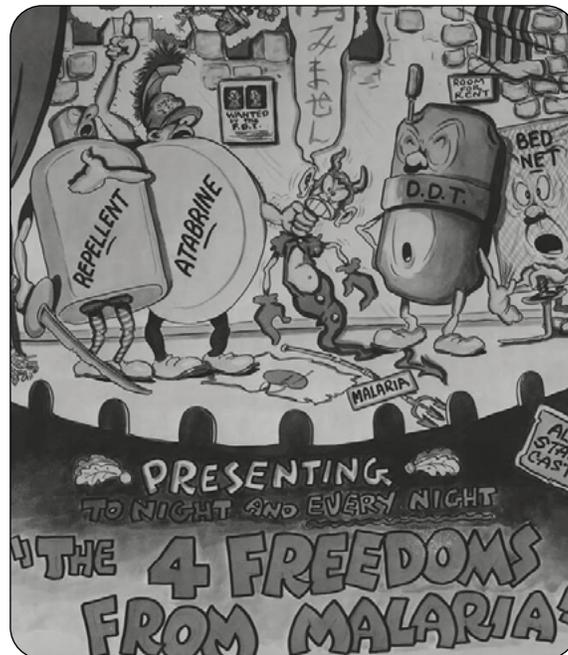
In the early 20th century, insects were feared as potential carriers of disease. Chemical insecticide use began as a way to save people from deadly illness. As soldiers joined the war effort in WWII, Dichlorodiphenyltrichloroethane (DDT) was employed to protect soldiers from the threat of typhus and malaria abroad. Sprinkled in sleeping bags and dropped from planes, DDT was heralded by the U.S. Army as the “war’s greatest contribution to the

future health of the world.”² Cartoons from the era, like this 1945 poster, illustrate people as diseases. Here, an overtly racist caricature of a Japanese person wearing devil horns represents malaria.

Turning next to the Vietnam War, pesticides were again used to advance the war effort. This time, herbicides were tactically used to destroy cover-providing vegetation or to destroy crops that provided food. We now know that the infamous Agent Orange — composed of 2,4,5-Trichlorophenoxyacetic acid and 2,4-dichlorophenoxyacetic acid — had deadly impacts on Vietnamese people as well as the American soldiers who handled the chemicals.

Today, pesticides continue to play a role in violent acts. Capsaicin is a regulated pesticide by the Environmental Protection Agency. Made from chili peppers, it is used as a repellent against rabbits

and squirrels and applied to the foliage of plants to keep insects from munching on leaves. It’s also the active ingredient in pepper spray and some tear gases. Though less harmful than the tear gas fumigants used in WWI, modern day pepper sprays and tear gases are still being used to violently control people.



The use of tear gas and all asphyxiating gases are now banned in warfare by the Chemical Weapons Convention, yet they continue to be used against civilians to gain control of a situation, even during a pandemic.

The city of Portland is nearing its 150th night of protests after the brutal and unjust killing of George Floyd by Minneapolis police in late May. As protestors in Portland rally each evening to advocate for their demands, they have been met by state and federal agents', forceful and repeated use of tear gas and mace.

HUMAN & ENVIRONMENTAL HEALTH

There are growing concerns by protesters, Portland residents and government officials about the extreme volume of tear gas being deployed in the city. Many Portland residents have been repeatedly exposed to tear gas smoke and have rising concerns about long term health effects and its effects on the environment.

Reports indicate residues in downtown have been affecting people hours after being deployed, causing itchy eyes and scratchy throats. There have also been several reports of irregularity in menstrual cycles for those who have been exposed to tear gas in extreme and repeated doses.

When trying to determine what all these chemicals are doing to the environment, state and city agencies say there's nowhere to look to for answers, because no other U.S. city has ever been subjected to such a sustained barrage of tear gas.³

SYSTEMIC CHANGE

With growing unrest and human and environmental health on the line, it has come time that we change how we approach our problems. Whether it be pests or protestors, we must get to the root of any issue. Just as creating healthy, diverse ecosystems prevents pest outbreaks, creating healthy, non-oppressive systems will correct the injustices that lead to protests. NCAP advocates for non-violent and non-chemical solutions to all systemic imbalance. We can no longer spray our problems away as the systematic dependence upon chemical solutions has done more harm than good.

To move forward, we must move past chemicals and violence and instead, work toward more just and equitable systems and agreements. Like the ban on chemical agents in warfare, we must continue to disband the use of such products in all its forms - pesticides and tear gas alike.

1. Feigenbaum A. Tear gas: from the battlefields of World War I to the streets of today. Verso Books; 2017.

2. Atlanta Journal. DDT seen for public by spring. 1945 Aug 6.

3. Samayoa M, Dake L. 60-plus days of tear gas leaves lingering questions about environmental impacts [Internet]. OPB; 2020 Jul 31 [cited 2020 Aug 27]. Available from: <https://www.opb.org/article/2020/07/31/tear-gas-environmental-impact-portland/>

NCAP Sues Department of Homeland Security

In October, NCAP joined a broad coalition of environmental justice and civil rights advocates to file a legal challenge against the Department of Homeland Security (DHS).

The lawsuit cites the federal agency's failure to analyze the potentially severe human health and environmental impacts before using chemical munitions against anti-racist protesters in Portland. An analysis is required by law as part of the National Environmental Policy Act (NEPA).

We seek a court order forcing the DHS to halt their use of chemical munitions, including tear gas, until the DHS performs a thorough analysis of the health and environmental impacts of these chemicals, and makes this information available to the public.

Our partners in the lawsuit include Cascadia Wildlands, 350PDX, Willamette Riverkeeper, and Neighbors for Clean Air. We are represented by the attorneys from ACLU of Oregon, Cascadia Wildlands, Willamette Riverkeeper and Markowitz Herbold.



Lessons from Organic Citrus Growers

by Christina Stucker-Gassi, Healthy Food & Farms Program Coordinator

Despite a slew of canceled travel plans this year, I did have the opportunity to take a trip in January. I traveled to the Rio Grande Valley in South Texas, a stone's throw from the US-Mexico border, for the National Sustainable Agriculture Coalition (NSAC) winter meeting. Food system reform advocates from across the country gathered in the warm, subtropical climate, a welcome respite from the bitter cold back home.

Building resilient food systems is imperative and we must remain hopeful while doing this work in the face of overwhelming challenges. This was my main take away after visiting an organic citrus grove outside of McAllen. The owners are former farmworkers who choose to farm organically as a result of their firsthand experience with conventional citrus operations. They gave our group a tour and shared some landscape analysis of their local food system. The demand for perfect, uniform produce is a colossal driver of food waste. This form of waste is particularly insidious, because wholesale standards drive consumer expectations, which drive grocery store demand. It's a vicious cycle that needs to be broken, but mustering the energy required to make systemic change is difficult among everyday consumers. The farmers are simply left with so much delicious, nutritious fruit they can't sell.

Sourcing practices are also a concern for local growers. For example, the majority of citrus in area schools comes from California, despite the Rio Grande Valley being one of the few places in the country where schools have an opportunity to get fresh, local food for their students year-round.

This was the first time NSAC had met in Texas, and the injustices perpetrated by our government on the southern border was an important reality to confront in our work, especially for those of us more removed from the real harm being caused. We must build stronger multi-racial and multi-issue coalitions to tackle the bigger issues of immigration reform



Building resilient food systems is imperative and we must remain hopeful while doing this work in the face of overwhelming challenges.

and climate change. Agriculture plays a big role in both. Although this is not the core mission of NCAP, we are building more authentic partnerships with farmworker communities since pesticide exposure is an issue that cuts across all human identities. Addressing heavy topics is essential, even during this pandemic.



Market Garden Pest Management

by Sharalyn Peterson, Healthy Wildlife & Water Program Coordinator

“We are unlike a majority of farms,” says market gardener Rhiannon Weidmann, owner of Vienna Gardens, a small, organic, sustainable farm in Silver Creek, Washington. Weidmann manages Vienna Gardens with her husband Corey, which includes a total of $\frac{3}{4}$ of an acre in cultivation of vegetable and flower beds as well as a small 70 year old fruit orchard. Rhiannon and Corey do not use pesticide sprays, even if the products are certified organic, nor do they use tarps, solarization or flame weeding. Instead, they rely on interplanting, crop rotation and a deep mulching system to minimize the effects of pests.

Interplanting is a growing technique often used in organic gardening that is primarily focused on maximizing crop yields, optimizing growing space and increasing the biological diversity in the garden. This is an important tool to have in your garden’s integrated pest management (IPM) plan as the use of two or more crop plantings complement each other, attracting beneficial predator and pollinator insects. Interplanting also deters detrimental pests, discourages weed growth and enhances soil fertility.¹

Crop rotation is an essential component of a sustainable growing system which focuses on maintaining soil fertility and tilth while eliminating the need for a fallow period. Unlike a monoculture where

a particular crop is planted repeatedly in the same field season after season, crop rotation includes growing varied crops in a systematic and recurring timeline on the same land.²

Deep organic mulching is a simple, effective way to suppress weeds by warming the soil, building its organic matter and improving its structure.³

“When the ecosystem is how it’s supposed to be, it works and works well. If, let’s say, we have an aphid problem on the kale, and nothing is helping, that means we as market gardeners are doing something wrong. So we either tear it out, feed it to the chickens or replant. We use a lot of cardboard to kill grass, put in a soil building material (i.e. chicken coop clean out), add forest compost and wait 3 to 4 months and we can plant right into it. Row covers are your best friend, too!”

The Weidmanns’ farm is largely no-till and they have done everything by hand including cultivation and soil building. “Our soil is healthy and filled with large amounts of microorganisms, macro-organisms, fungi and all that other naturally occurring good stuff.”

1. Shrivastava G, Rogers M, Wszelaki A, Panthee DR, Chen F. Plant Volatiles-based Insect Pest Management in Organic Farming. *Critical Reviews in Plant Sciences*. 2010; 29(1-3):123-133.

2. Liebman M, Dyck E. Crop Rotation and Intercropping Strategies for Weed Management. *Ecological Applications*. 1993; 3(1):92-122.

3. Gheshm R, Nelson Brown R. Organic Mulch Effects on High Tunnel Lettuce in Southern New England. 2018; 28(4): 485-491.

NCAP Seeks Board Members

Have you pulled weeds, planned a community event, grown organic veggies, managed a budget, or marched for a cause? If so, we need you! The NCAP board of directors provides governance and oversight, in support of the mission and fiduciary health of the organization.

If you share a passion for protecting community health, addressing health equity and inspiring ecologically sound alternatives, we encourage you to apply. We especially encourage young people, people of color and minorities to apply to serve as a volunteer board member. New board members join with an introductory term of one year, which can be renewed. Commitment of time is estimated at approximately four hours per month.

Email info@pesticide.org for more information.

Memberships and donations are the lifeblood of NCAP's success. Your support has helped us advance alternatives through education, research and advocacy for over 40 years.

THANK YOU!



NCAP board and staff are committed to a world where communities, water, wildlife, and food are healthy and free of toxic and persistent pesticides.

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