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WAYS ANIMALS HAVE ADAPTED TO URBAN LIFE

BIG CITY LIVING: SLOW DOWN, STRESS LESS, AND BE HAPPY



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RENEWABLE POWER IN GERMANY

MEDICINAL HERBS YOU CAN GROW IN YOUR BACKYARD



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CAN WE SAVE OUR PLANET?

What the Climate Movement can learn from the Nuclear **Freeze Campaign**

By Duncan Meisel

The Nuclear Freeze Campaign of the 1980s saved the world from nuclear war. Here's what today's climate activists can learn from its success.

014 was the hottest year in recorded history. 2015 is on track to be even hotter—and yet, before the most important international climate talks of the decade, even the most ambitious promises of action will fall short of what science demands.

At the same time, the movement to stop climate change is also making history-last year the United States saw the biggest climate march in history, as well as the growth of a fossil fuel divestment movement (the fastest growing divestment campaign ever), and a steady drumbeat of local victories against the fossil fuel industry.



In short, the climate movement, and humanity, is up against an existential wall: Find ways to organize for decisive action, or face the end of life as we know it. This is scary stuff, but if you think no movement has ever faced apocalyptic challenges before, and won, then it's time you learned about the Nuclear Freeze campaign.

Following Ronald Reagan's election in 1980. the global anti-nuclear movement also stood up to a global existential crisis-one that was also driven by a wealthy power elite, backed by faulty science and a feckless liberal establishment that failed to mobilize against a massive threat. The movement responded with new ideas and unprecedented numbers to help lead the world towards de-escalation and an end to the Cold War.

Under the banner of the Nuclear Freeze, millions of people helped pull the planet from the brink of nuclear war, setting off the most decisive political changes of the past half century. The freeze provides key lessons for the climate movement today; and as we face up to our own existential challenges, it's worth reflecting on

both the successes and failures of the freeze campaign, as one possible path towards the kind of political action we need. \rightarrow



Mikhail Gorbachev and Ronald Reagan signed the INF Treaty on December 8th, 1987. Formally the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles.

A SHORT HISTORY OF THE NUCLEAR FREEZE CAMPAIGN

n 1979, at the third annual meeting of Mobilization for Survival, a scientist and activist named Randall Forsberg introduced an idea that would transform the anti-nuclear weapons movement. She called for a bilateral freeze in new nuclear weapons construction, backed by both the United States and the Soviet Union, as a first step towards complete disarmament.

Shortly afterwards, she drafted a four-page " Call to Halt the Nuclear Arms Race" and worked with fellow activists to draft a fouryear plan of action that would move from broad-based education and organizing into decisive action in Washington, D.C. Starting in 1980, the idea took hold at the grassroots, with a series of city and state referendum campaigns calling for a Nuclear Freeze, escalating into a massive, nationwide wave of ballot initiatives in November 1982—the largest ever push in U.S. history, with over a third of the country participating.

The movement also advanced along other roads: In June 1982, they held the largest rally in U.S. history up to that point, with somewhere between 750,000 and 1 million people gathering in New York City's Central Park, along with countless other endorsements from labor, faith and progressive groups of all stripes. Direct action campaigns against test sites and nuclear labs also brought the message into the heart of the military industrial complex.

The effort continued into electoral and other political waters until around early 1985, pushing peace measures at the ballot box and in the nation's capital, but never quite returned to the peak of mobilization seen in 1982.

The impact of this organizing was palpable: President Reagan went from calling arms treaties with the Soviets "fatally flawed" in 1980, and declaring the USSR an "evil empire" in a speech dedicated to attacking the freeze initiative in 1983, to saying that the Americans and Soviets have "common interests... to avoid war and reduce the level of arms." He even went so far as to say that his dream was "to see the day when nuclear weapons will be banished from the face of the earth." The movement's popular success led the president to make new arms control pledges as part of his

If things get hotter and hotter and arms control remains an issue, maybe I should go see [Soviet Premier Yuri] Andropov and propose eliminating all nuclear weapons.

strategy for victory in the 1984 election. "If things get hotter and hotter and arms control remains an issue," Reagan explained in 1983, "maybe I should go see [Soviet Premier Yuri] Andropov and propose eliminating all nuclear weapons." Reagan's rhetorical and policy softening in 1984 opened the door for Mikhail Gorbachav—a true believer in the severity of the nuclear threat, and an advocate for de-escalation—to rise to power in the Soviet Union in 1985. Gorbachev's steps to withdraw missiles and end nuclear testing, supported by global peace and justice movements, created a benevolent cycle with the United States that eventually brought down the Iron Curtain and ended the Cold war.

Although the freeze policy was never formally adopted by the United States or Soviet Union, and the movement didn't move forward into full abolition of nuclear weapons, the political changes partially initiated by the campaign did functionally realize their short term demand. As a result, global nuclear stockpiles have indeed been declining since 1986, as the two superpowers began to step back from the nuclear brink.

THE CLIMATE MOVEMENT HAS ROOM TO GROW

hile the Nuclear Freeze shows that movements can move mountains—or at least global super powers—it also shows that the climate movement isn't yet close to doing so. For starters, its size is not at the scale of where it needs to be—not by historical measures, at least. The largest mobilization of the Nuclear Freeze campaign was the largest march in U.S. history up to that point, and included double the number of people who participated in the People's Climate March. The referendum campaigns that reached their peak later in 1982 were historic on a different scale as well: \rightarrow



They were on the ballot in 10 states, Washington, D.C., and 37 cities and counties, before going on to win in nine states and all but three cities. The vote covered roughly a third of the U.S. electorate.

This was a movement powered by thousands of local organizations working in loose, but functional, coordination. Even in 1984, which is generally considered after the peak of the Nuclear Freeze campaign, the Freeze Voter PAC (created at the Nuclear Weapons Freeze Campaign conference in St. Louis in 1983) included 20,000 volunteers in 32 states—an electoral push thus far unmatched in the climate movement's history.

At the same time, this moment also showed how quickly movements can

decline. While the Nuclear Freeze campaign thrived in the very early 1980s, press and popular attention rapidly dissipated. There are many possible reasons that could explain this: from a shift in strategy away from grassroots campaigns towards legislative action (the Nuclear Weapons Freeze Campaign conference moved from St. Louis to Washington, D.C., around this time), to a softening of President Reagan's nuclear posture, taking the wind out of the movement's sails. The real answer is probably a combination of all of the above. From a peak of organizing in 1982-83, participation in the movement significantly declined by the mid-1980s, and mostly dropped off the political radar well before 1990.

FEAR IS A REAL MOTIVATOR AND A REAL RISK

hat drove the initial outpouring of action? In no small part, it was fear. As Morrisey, lead singer of The Smiths, sang in 1986, "It's the bomb that will bring us together."

In the late 1970s, research about the The debate about the use of fear in the climate movement is ongoing, but survivability of a nuclear conflict became dramatically clearer, showing that even compared to the debate about nuclear limited nuclear exchanges could threaten weapons, the mainstream climate all life on Earth. Also in this period, movement under-appeals to the fear Physicians for Social Responsibility initiated of climate change. While it's clear that a widespread education campaign that apocalyptic, decontextualized appeals dramatized the local impacts of nuclear to fear are demotivating, grounded conflict on cities around the country. assessments of the problem that speak These developments, combined with honestly about how scary the problem the real impact of Reagan's escalatory really is, and are attached to feasible rhetoric, created fertile ground for the solutions are crucial to mobilizing large numbers of people. One example of \rightarrow freeze campaign, allowing movement

voices to appear more reasonable than the technocratic nuclear priesthood that had lost touch with the public's fears. Only when Reagan began to step back his posturing and present alternative arms control proposals was he able to blunt the power of the movement. an effective appeal to fear was Bill McKibben's widely-read 2012 Rolling Stone article

"Global Warming's TerrifyingNew Math," which succeeded for several reasons: First, it used specific, scientifically grounded numbers to explain approaching thresholds for serious change. Secondly, it also was connected to a new, national organizing effort to divest from fossil fuels, including a 21-city tour that provided critical mass to begin campaigning.

Nevertheless, fear is, by its nature, hard to control and—in the case of the freeze campaign—it provided an opportunity for co-optation of the movement's rhetoric. Most significantly, President Reagan's Star Wars program was able to redirect the fear of nuclear exchange into a technocratic, bloated military project—rather than solutions to the root cause of the problem. The Reagan administration drew on the president's personal charisma and reflexive trust in the power of the military industrial complex to transform some of the concern generated by the movement, and turn it towards his own ends.

The climate movement faces a similar threat from technical solutions that benefit elites, such as crackpot schemes to geoengineer climate solutions by further altering the Earth's weather in the hopes of reversing planetary heating, as well as other unjust ways of managing the climate crisis. Discussions about big problems need to be paired with approachable, but big solutions.



ONE SIMPLE DEMAND

he Nuclear Freeze proposal turned the complex and treacherous issue of arms control into a simple concept: Stop building more weapons until we figure a way out of the mess. It was a proposal designed to be approachable in its simplicity, and careful in the way it addressed competing popular fears of both nuclear annihilation and perceived Soviet aggression.

The idea of a bilateral freeze—the United States stops building if the Soviet Union does too—handled both of these concerns in a way that made the nuclear problem about growing arms stockpiles, not the specifics of Cold War politics. Even though the movement against nuclear weapons had existed as long as the weapons themselves, the idea of the bilateral freeze turned arms control much more into the mainstream of American political discussion at a moment of real escalation with the Soviets.

In a certain way, climate change is simple too: We need to stop building fossil fuel infrastructure wherever there are viable renewable or low-carbon alternatives, and do it quickly. Growing the movement in this moment will require bold, bright lines that provide moral directness and opportunities to take giant leaps forward in terms of actual progress to reduce carbon emissions.

The simplicity of the freeze idea was intentional. At their meeting in 1981, the Nuclear Weapons Freeze Campaign made it clear that the path to power was not through access in Washington, but through "recruiting active organizational and public support"—a strategy that required demands that were easy and quick to explain.

Developing such active public support was a wide-ranging process, but the campaign distinguished itself from other contemporary peace movements by its use of the electoral system—first via local and state referendums in 1980-82, and then with initiatives like Freeze Voter in 1984.

The referendum strategy, in particular, was a tool that offered intuitive, broad-based entry points for organizing with clear steps for participants. And it worked: The freeze campaign won an overwhelming number of the referendums it was a part of in 1982. Combined with demonstrations, education campaigns and other grassroots actions, this strategy allowed the movement to translate public sympathy into demonstrable public support.

It is possible that the current moment in the climate debate could be ripe in a similar way. The public broadly favors more climate action , but is faced with relatively few meaningful opportunities to act on it. The task of growing the climate movement is in many ways a task of activating these people with opportunities for deeper involvement. \rightarrow

OTHER LESSONS LEARNED

n important caveat must be made when discussing the breadth of the freeze campaign's support. Its demographics—mostly white and more middle class than the public at large reflected those of the establishment peace movement from which it came. That lack of diversity not only represents a failure of organizing, but also could have contributed to the movement's lack of staying power and lasting political potency.

While at least one key freeze organizer I spoke with said explicitly that the climate movement is succeeding in this regard in ways they never did, the experience of the Nuclear Freeze explains just a few of the perils of failing to create a real diverse climate movement. This is a challenge that will take work throughout the life of the climate movement, but it's at least underway in some key regards.

The freeze campaign thrived on an initial wave of activism that was grounded in local organizing via the referendum strategy. But after organizing shifted (perhaps prematurely) more towards legislative strategies, the next steps for the hundreds of thousands of people involved in the campaign never emerged. After the freeze became mainstream discourse—supported by hundreds of members of Congress, presidential candidates and millions of voters—the next step towards disarmament remained murky.

Ultimately, the referendum strategy was symbolic: Cities and states did not have any formal power over U.S. or Soviet nuclear arsenals. But symbols matter, and so does democracy. The overwhelming vote for the freeze in 1982 shifted the political ground out from underneath liberal hawks and the president, allowing more progressive voices to ride the movement's coattails—to the point where the 1984 Democratic Party platform included a freeze plank. In other words, it turned diffuse public opinion into a concrete count of bodies at the polls.

The referendum vote also asserted the right of people to decide such weighty issues, taking them out of the realm of the military industrial complex and into the light of day. When asked, people wanted a chance to be involved. The massive and democratic nature of the freeze campaign struck a blow against the social license of the nuclear industrial complex by yanking the implied consent of the majority of the American people from both the military's leadership and their tactics.



THE PATH FORWARD IN AN UNCERTAIN TIME

s the divestment movement grows, particularly on college campuses another effort aimed at the social license of an entrenched and distant power elite—the lessons of the freeze campaign suggest that the climate movement will need to answer many important questions in the coming months and years.

We know how to march, but what comes next? Public opinion has shifted, perhaps decisively, but how do we turn that diffuse energy into a story about the need for action? If we mobilize in 2016 for the election, what comes in 2017? And if we organize towards a single big demand, as the Freeze campaign did in the 80s, how will we translate that into ongoing power?

The climate movement faces an epic, unique struggle, but the challenges it faces as a movement are not as singular as some may think. As the movement ventures onto new ground, it's worth remembering that others have done what felt like the impossible, in the face of an uncertain future—and triumphed.

The author thanks Freeze campaign activists Leslie Cagan, Randy Kheeler, Joe Lamb, and Ben Senturia for supporting the research of this article.



STAYING HUMAN IN A TIME OF CLIMATE **CHANGE:**

New Author on Science, Grief, and Hope

By Christopher Zumski Finke

University of Montana.



Jackson says.

central current of her book.

Anna Urlapova

"Climate change, like the loss of parents, necessitates an experience of grieving," the 32-year-old author says. "That also includes picking up the pieces and moving forward into futures that are shapeable and malleable and hinged upon millions of individual imaginations." \rightarrow

For geographer and author M Jackson, knowing climate science isn't enough. We need to get our hearts involved too.

uthor M Jackson's While Glaciers Slept: Being Human in a Time of Climate Change was released last week by Green Writers Press. In the book, Jackson's first, she examines climate change by combining personal stories with scientific exploration. As both a scientist and a writer by trade, Jackson studied climate change and how to communicate science through writing at the Environmental Science Graduate Program at the

"I wanted to explore our capacity to experience personal loss-the loss of family, the loss of lovers, the loss of a local landscape, the loss of certainty in the weather-to grieve profoundly while simultaneously not giving in,"

In the opening pages of While Glaciers Slept, Jackson explains that both her parents died of cancer within two vears of one another while she was in her twenties. Her experiences of loss, and the despair that followed, is the Jackson expertly pairs her loss, grief, and anger with the scientific exploration of our Earth and solar system. When she opens a chapter with learning of her father's cancer for the first time, readers end up in a discussion about the history of wind power as a human energy source (it starts in seventh century Afghanistan, for the record).

Bill McKibben, who wrote the introduction to While Glaciers Slept, draws on the duality of Jackson's book by asking if our big human brain "has come attached to a big enough heart to get us out of the trouble we're in." Jackson herself hopes blurring the distinction between the heart and the brain will help humans make it through this period.

The jacket of Jackson's book describes her as an adventurer, and the word seems to fit her well. As a trip leader with the National Geographic Student Expeditions, Jackson takes students on field assignments to study different cultures and the diversity of the natural world. Currently, she's heading to Iceland, and then Alaska, on a tour of lectures about climate change. Despite her busy schedule, Jackson has managed to find the time to also become a Ph.D. candidate in geography at the University of Oregon. Once her lecture tour is done, she will head back to Iceland for nine months of doctoral research on the effects of glacial loss on the Icelandic people. \rightarrow



In the midst of her adventuring, I chatted with Jackson over email about her book, the vulnerability of writing about loss, and how she remains hopeful when confronted by the challenge of climate change.



Christopher Zumski Finke: You could have written one book about climate change, and another one about how you've coped with the death of your parents. Instead, you combined them into a single book. Why?

M Jackson: After my mother died, I was numb, in shock, and having a difficult time engaging with the world. In many ways, I just turned off. It was too much to handle. But while my heart was in pieces and tucked down in the darkest basement, my mind kept telling me not to stay in that grief-stricken landscape for too long—or I might not come back. So I started writing—because, for me, writing makes me feel like I am participating in the world. I started writing about my mother.

But then my father died, and there I was, numb and in shock again. And my heart was not coming out of that dark basement. Eventually, when my mind piped up and started chatting, it drew analogies between what I was experiencing—the loss of my parents—and what I was researching climate change. The language for both is quite similar. This is what I focused on. **Zumski Finke:** Your book explores the loss you felt, and pairs it with climate change, energy solutions, and scientific discovery. Big heart and big brain, as Bill McKibben puts it in your book's intro. Are you a heart or head person?

Jackson: I am both a big heart and a big brain person, but I think my heart tends to filter my mind.

Zumski Finke: How does that dynamic influence your thinking about climate change?

Jackson: I think we can create the very best science out there about the problems of climate change, yet if we aren't filtering that science through our hearts, there remains as we see today—a disengagement. People intellectually understand climate change; we know "the science" of it. But now, vitally, we need more heart.

Zumski Finke: I want to ask about the section of your book when you're brought into close contact with the woman driving the car that crashed into your mother and led to the amputation of her leg. In those pages you explore your impulse for violence, and your thoughts wander into cold, alien planets hidden in the cosmos. It's a beautiful piece of writing. What is it like writing, and sharing, such personal pieces of your experience?

Jackson: Climatic changes are experienced first through the human condition. We are living in this changing world together and subsequently are in many ways responsible to one another for our actions. That's a really big thing. How do we even start that

move forward in a productive manner? If anything, climate change has shined a really bright light on the rampant inequities of the human condition on this planet. Why are we all not angry?

For me, I think that authentically sharing our personal experiences—the good and the bad and everything in the middle—is an excellent place to start, to move forward into our shared future. In the book, I tried to share my experience as I lived it. And there are times when I go back through the pages and certain things catch me. This was a hard book to write, and it makes me vulnerable in a way to the world. But then, we have to be vulnerable. Climate change is made up of millions people, human beings with human lives. My story is your story, and our story.

Zumski Finke: Your book has garnered attention from climate change deniers and trolls. That started even before it was released. How are you handling that?

Jackson: Today, I'm largely ignoring them. I wasn't at first, and I found the negative attention—let's call it what it is: hate mail—incredibly hurtful. But that was in the beginning. The thing is, while my heart goes out to the people who think sending bullying, sexualized, and hateful letters is somehow helpful, I do not have time for them. I've been to that dark place with little hope. That place doesn't help. My compass can't just spin and spin on darkness. My compass spins on hope, and points toward an exciting future.



Zumski Finke: Are you optimistic about the future of combating climate change?

Jackson: I am not necessarily optimistic about combating climate change—I'm not sure that is the most helpful way to think about the changes that are and will be happening. I am optimistic about slowing and lessening our global greenhouse gas emissions, learning to live with present day climatic changes, and shaping our future and our society's place within that future. Climate change is not an enemy to be vanquished; it is a phenomenon deeply tied to our daily lived existence. It is part of the conversation our mixed up, beautiful, contrary, and imaginative people must have about who we are as a people and where we want to go. I am optimistic about peoples' better selves, and I think right now is an optimistic, hopeful time where we can be bold together.

Zumski Finke: That's a nicely described vision for climate optimism. How do you manage to stay that way?

Jackson: For me, there isn't another option. I don't find terrifying messages of apocalyptic disaster all that helpful, nor the messages about every single thing that wasn't done perfectly right.

There is no fabled "solution" for climate change. Rather, there are a million and more creative ways to engage at multiple scales across the planet. What works in one place might not translate to another, or up or down a scale of governance. What I have seen are hundreds of thousands of people quietly getting things rolling.



And so each morning, I get out of bed and get excited for the creative things I'll see that day—the wows and the unthinkables and the quiet smiles—and sometimes, frankly, I go to bed feeling a little down. But each day is different, and each morning is a hopeful one.

NEARLY **OF GERMANY'S** POWER **CAME FROM** RENEWABLES LAST SATURDAY

By Araz Hachadourian

or one day last week, 78 percent of Germany's power was generated by renewables
 like solar and wind. The country is spending €200 billion to move away from fossil fuels permanently.

Last Saturday, on July 25, 78 percent of Germany's electricity was produced by wind and solar power.

What caused the record-breaking numbers? According to Craig Morris, a writer for the German website Energiewende, it was the weather. Morris attributes the rise in wind power to a storm passing through the north of the country, where the majority of Germany's wind turbines stand. It also helped that it was a sunny day in southern Germany, home to most of the country's solar panels.

The infrastructure that allowed Germany to harness energy from this "perfect storm" has been in place for a few years now. Back in 2011 Germany's government announced plans to phase out nuclear power. Through a project called Energiewende, Germany hopes 80 percent of its energy will come from renewables by 2050.

While the goal is lofty for an industrial nation of 80 million people, they've already hit some huge milestones. In 2014, more than 25 percent of Germany's annual energy came from renewables, an increase from 6 percent in 2000.

Energiewende will cost an estimated €200 billion by the time it's complete. But economists predict the renewable industry will create upwards of 80,000 jobs. And as the price of fossil fuels surpasses the price of other energies, investing in renewables may save Germany money in the long run.

Part of the Energiewende initiative is an interactive tool that lets users see what sources Germany's electricity is coming from. Here is what it looked like last Saturday:

Image from Energy Charts: http://www.yesmagazine.org/planet/nearly-eighty-percentof-germanys-power-came-from-renewables-last-saturday/renewable_powerproduction_ week30_2015.png/image

(Komentar: lag egen infografikk basert på originalen)

"It's a significant milestone," said Osha Gray Davidson, author of Clean Break, a book that looks at how Germany is handling its energy transition and what America can learn from them.

"Even if it owes something to unusual weather. I'm always thrilled to see renewable energy records broken," Davidson told YES! in an email. "These events offer hope in rather dark times."

MEDICINAL HERBS YOU CAN GROW IN YOUR BACKYARD

By Miles Schneiderman

These herbs aren't just for cooking—here's how you can use them to treat ailments from asthma to anxiety.

At its core, most of medicine is still herbology, according to Dr. Jenn Dazey, naturopathic physician at Bastyr University's Department of Botanical Medicine. And growing your own medicinal garden is easier than it might seem. In fact, you might already have one. Many common culinary herbs have a long history as traditional medicines.



1. COMMON SAGE Salvia officinalis

Use it for:

Cooling and drying body functions because of its phytosterols. This property makes sage useful in treating high fevers, diarrhea, and excessive sweating or phlegm, as well as throat inflammation, asthma, and bronchitis.

How:

Dry and eat the leaves, or brew them fresh in a tea. For all medicinal infusions, make sure to cover the tea with a lid for at least ten minutes before drinking to avoid the evaporation of critical ingredients.

Grow it:

Sage is a perennial that thrives in hot, dry climates but will grow in some milder conditions. Plant it in sandy soil in a sunny spot.

Interesting to note:

Some studies show sage tea is effective for treating diabetes patients.

2. PEPPERMINT

Mentha piperita



Use it for:

Relieving gastrointestinal problems such as irritable bowel syndrome, dyspepsia, colonic spasms, and gastric emptying disorders. Peppermint calms intestinal muscles and improves bile flow.

How:

?

The best medical use of peppermint comes from extracting the essential oil. Crush the leaves, pack them into a lidded jar, and cover them with vodka. Leave the jar to steep, shaking occasionally; the longer it steeps, the stronger the extract. Strain out the leaves, leaving only the extract behind.



Grow it:

Peppermint will grow almost anywhere, but thrives in partial shade and in rich, moist soils.

Interesting to note:

Like all mints, the primary active ingredient of peppermint is menthol, which is why peppermint tea is an effective decongestant and expectorant. It can also soothe coughing and sore throats.



3. CATNIP Nepeta cataria







Use it for:

Treating common psychological problems such as insomnia, anxiety, and addiction. It's also a natural sedative for children, particularly when they are sick, as it helps soothe the stomach and relax the body.

How:

Dry leaves and mix with honey for eating, or brew in a tea.

Grow it:

Catnip is a perennial that prefers rich, well-drained soil or loam and will grow in full sun or partial shade.

Interesting to note:

Catnip can also be used as an insect repellant, although Dr. Dazey recommends avoiding it if you are planning to enter forests or jungles populated by large cats.

4. ROSEMARY

Rosmarinus officinalis

Use it for:

Increasing capillary circulation and antioxidant levels. Its anti-inflammatory properties help reduce the risk of cardiovascular disease and other chronic diseases of the heart and blood.

How:

The most effective way of using it as a medicinal herb is brewing it in a tea.

Grow it:

Somewhere warm and humid. Rosemary thrives in dry, well-drained soil and fails in extreme cold. In climates with heavy winters, plant it in a container that can be moved indoors.

Interesting to note:

The carnosic acid active in rosemary helps protect against cellular and brain damage inflicted by free radicals. This makes it an effective preventative for headaches, memory loss, strokes, and neurological degeneration. Research is being conducted on rosemary's potential use in the treatment of conditions like Alzheimer's and Lou Gehrig's disease.





Hyssopus officinalis

Use it for:

Treating cuts, scrapes, and bruises. With its natural antiseptic properties, hyssop is effective for skin abrasions.

How:

Dice the leaves by hand or in a food processor to use in a poultice. Alternatively, boil the leaves and soak bandages in the strained mixture.

Grow it:

Hyssop is a perennial, drought-resistant plant. It grows best in warm, dry climates with well-drained soil and full sun exposure.

Interesting to note:

Hyssop has many other medical uses that date back to ancient times, though accounts differ on whether the hyssop we use today is the same plant referenced in the Bible's Psalm 51.

BIG CITY LIVING MAY HELP YOU **SLOW DOWN**, **STRESS LESS, AND BE HAPPY. REALLY!**

By Zanna McKay

From New York City to Barcelona, cities across the world are turning to "slow living" to make their communities happier and healthier in the face of increasing urbanization.

he industrial city of Wenzhou, China, city governments are trying to make their (population 2 million) is currently communities more enjoyable to live in and known for its rapid development as less destructive to the environment. an economic hub, but some residents hope THE BEGINNING OF SLOW CITIES it may someday be known as a "slow city."

Recently, a delegation of Wenzhou citizens visited the Tuscany headquarters of Cittaslow, an organization credited with starting the slow cities movement. The delegation was concerned about the side effects of a hyper, fast-paced life and wanted to learn more about how living slow might preserve cultural heritage in China. The delegation visited local markets and artisans' studios, including a shop where the Italian art of handmade shoes is still practiced. The artisans they met emphasized the role Cittaslow has played in preserving the value of crafts, like shoemaking, that are only possible with a great deal of time invested and a strong local economy.

Every city has a unique personality that can be preserved and a local community that can be strengthened.

The United Nations projects that nearly 70 percent of the world's population will live Slow city principles stress the importance in cities by 2050. And indeed, the industrial of things like eating local, in-season food, shopping at locally owned businesses, and and economic hubs of the world may be the last places that evoke ideas about preserving cultural heritage and living slow. But with inevitable population small-operation craftsmanship. → growth in urban areas on the horizon, many

ittaslow grew out of Slow Food, a local food movement founded in 1986 to counter the rise of fast food in Italy. Thirteen years later, Cittaslow became a way to expand Slow Food concepts.

"The 'slow' philosophy is applied to not only what you eat and drink, but to all aspects of life in a town," said Paolo Saturnini, Cittaslow's founder.

Saturnini created the organization when he was mayor of Greve, in Chianti, to push back against globalization and preserve the unique treasures of Tuscany. He was inspired by interactions he saw in Italian piazzas, like the market the delegation from Wenzhou recently visited. He saw value to what happens when people come together face to face, catch up, relax, and take in their surroundings.

Supporters of the movement also emphasize the value

of a life where work is not necessarily prioritized above all else, and the importance of making room for natural environments so residents can experience the rhythm of the seasons. Over the years, Cittaslow has sought to prove every city has a unique personality that can be preserved and a local community that can be strengthened.

Currently there are 192 certified slow cities worldwide. Sonoma, California, was one of the most recent additions to the growing list. To be certified, Cittaslow towns must have fewer than 50,000 people.

But that is beginning to change. Pier Giorgio Oliveti, director of Cittaslow, said he has noticed a huge influx of interest from major metropolitan cities over the last five years. According to Oliveti, the technological infrastructure available in bigger cities, such as broad-reaching public transit, is a boon to those who want to simplify. One of Cittaslow's core values is utilizing today's technological innovations to recreate the slower lifestyle of the past.

"There is no such thing as a slow city that is not also smart," said Oliveti. "Infrastructure and technology are essential."

LIVING AT THE THIRD STORY

Ithough some city governments are just now catching on to Cittaslow's Lideas, individuals have been implementing slow living principles on their own for quite some time. William Powers, a senior fellow at the World Policy Institute in New York City, recently spent a year living slowly in Manhattan, a practice outlined

in his new book, New Slow City. Cittaslow and Slow Food provided the foundational concepts, said Powers, for his experiment.

In order to slow down in Manhattan, Powers and his wife uncluttered their lives by giving away nearly 80 percent of their possessions and moving into a 320-squarefoot apartment. He also downsized his work week by working more efficiently. Instead of facing a constant stream of consulting, writing, and public speaking, Powers assessed his income-to-time-invested and then squeezed the most strategic tasks into a two-day work week.

Living slow, says Powers, "starts with each of us creating space to ... ask the core questions, like: How do we find balance in a world that is changing more quickly than ever before in history?"

During his yearlong experiment, Powers used his liberated time to explore New York. As he strolled downtown, flâneur style, he developed his own slow-city principle: "living at the third story." Every time he walked down the street he made a conscious effort to observe the sky, trees, and birds above him. He noticed that doing that helped him ignore the often-stressful commotion on the city's ground level and instead observe the hawks stalking pigeons from the Washington Square Arch or the leaves changing on trees growing from the sidewalk.

Thanks to increased interest from citizens like Powers, the world's biggest cities are taking steps to implement Cittaslow principles and make it easier for residents to work less, build community, and enjoy nature.

as a slow city that is not also smart, infrastructure and



BARCELONA



WHERE: Barcelona POPULATION: 1.6 Million WHAT: Urban Agriculture SLOW PRINCIPLE: Smart City/ Green Urban Sanctuaries

B arcelona's mayor and the city's chief architect have both been working with Cittaslow for years, spearheading the organization's new project, "Cittaslow Metropolel." The project, geared toward bringing slow living principles to big cities, has a long list of participating cities including Busan, South Korea; San Francisco, Rome, and Milan. Barcelona's mayor announced the city's ambitious goal at the 13th Biennale of Architecture in Venice, saying he wants Barcelona "to be a city of productive neighborhoods at a human pace, making up a hyperconnected city of zero emissions."

Inspired by a lecture given by Oliveti on slow living principles, students at the Institute for Advanced Architecture of Catalonia (IAAC) were recently challenged to imagine each neighborhood in Barcelona as a slow city, with each piece connecting as one giant "smart city." One idea that emerged from IAAC was to transform typically underutilized urban spaces, like pedestrian bridges, as urban agriculture sites that double as green sanctuaries for citizens. More greenery means cleaner air and fresher food, and aligns with the slow principle of keeping nature within reach.









WHERE: Tokyo **POPULATION:** 13.4 Million **WHAT:** Voluntary Blackout **SLOW PRINCIPLE:** Minimizing **Environmental Impact**

okyo, one of the largest cities in the world, is home to its own slow living organization called Sloth Club. Founded more than 15 years ago, the club's mission includes minimizing "our destructive impact and finding joy in our life without consuming an endless chain of meaningless things." In admiration of the sloth's slow style, the club also works to save sloth forest habitat in Ecuador by supporting fair-trade products from the region.

Back in Tokyo, members of Sloth Club follow principles like eating slow, supporting local businesses, upcycling (repurposing something that could have been thrown out), and walking or using public transport. One of the club's main initiatives is a national campaign calling for residents of Tokyo to turn off electric lights for two hours in the evening during the summer and winter solstices to promote an appreciation of natural light and minimal use of electricity.







WHERE: Providence, RI, and Columbia, MO POPULATION: 178,000 and 115.000 WHAT: Walking School Bus **SLOW PRINCIPLE:** Community Organizing

he "walking school bus," an original tenet of Cittaslow, is gaining popularity in places like Providence, Rhode Island, and Columbia, Missouri, where thousands of schoolchildren walk to school en masse, guided by an adult volunteer. Last year Molly Rusk wrote an article for YES! Magazine about how the trend benefits student's health and builds strong community ties.





DENVER AND NEW YORK

WHERE: Denver, CO, and New York, NY POPULATION: 649,0000 and 8.5 Million WHAT: Micro-apartments SLOW PRINCIPLE: Downsizing

enver and New York are about to cut ribbons on new micro-apartment complexes, akin to the efficiency apartments that were commonplace decades ago. For people looking to slow down their routine, affordable apartments in downtown Denver and New York City give those who would normally have to commute the ability to walk or bike to their offices.

Residents of these micro-apartments save money, can spend less time working, and minimize their impact on the environment. The units, which tend to average a compact 330 square feet, include a kitchen, bathroom, balcony, and an in-house bike and car-sharing program.

LIVING SLOW TO BUILD COMMUNITY

fter spending a year living on the third story in New York City, Powers and his wife have moved to Bolivia and taken the slow habits they learned in one of the world's biggest cities with them. Beyond cutting expenses and reducing the amount of hours he had to work, Powers designed his routine so he interacts with the people who live and work in his neighborhood.



Instead of rushing past people every day, he now stops to engage with his neighbors. Of all slow city principles this is perhaps the most important one: reconnecting with your surroundings.

Powers talks about the day's catch with the fishmonger at the restaurant below his apartment. He has become a regular fan of the jazz group that plays in the park near his house. And he has learned the names of the pigeons from the man who feeds them every day.



WE AREN'T ALONE IN **OUR CITIES: 12 WAYS ANIMALS HAVE ADAPTED TO** URBAN LIFE

- By Matt Soniak

City living is changing animals in surprising ways. But they're also transforming the cities they share with us.

s cities expand, it's not just humans who are becoming increasingly urbanized. Concrete jungles and actual jungles are no longer realms apart, and as natural and human-created environments bleed into each other and intertwine, animals that walk on four legs, six or eight legs, fly or slither are calling cities home more and more.

In Feral Cities: Adventures With Animals in the Urban Jungle, released this month by Chicago Review Press, author Tristan Donovan finds that just like shifting from rural to urban living changed humans, city living is changing animals in sometimes surprising ways. At the same time, urban wildlife is changing the way some cities operate and use their resources. Here are just a few examples of that back and forth from the book and other recent research.

THEY GET BIGGER

or some animals, urban areas are all-you-can-eat buffets. There are bugs, garbage, and prey animals to eat, and even humans who will feed you. Sometimes this means that animals eat better in the city than they do in "the wild."

For example, Donovan says that gopher snakes in Paradise Valley, Arizona are consistently larger and in better shape than their country cousins because they have a steady supply of rats to eat. Meanwhile, in several towns around Lake Tahoe, urban bears pack on the pounds thanks to an



abundance of trash and leftover food from humans and weigh almost a third more than rural ones.

THEY FOLLOW THE RULES OF THE ROAD

ollisions with cars may be the biggest killer of Chicago's estimated 2,000 coyotes, but many of them have learned a thing or two about navigating city streets safely. Scientists studying the animals as part of the Cook County Urban Coyote Research Project have found that they'll sit patiently on the sides of roads and on street corners waiting for traffic to stop at a red light before trying to cross. They even seem to understand divided highways, and will watch only in the direction of oncoming traffic, without looking the other way. If there's a median, they'll dash across one section of the road and repeat the process.

THEY DOWNSIZE THEIR HOMES

ike a person who shares a place with four roommates so they can live in a great neighborhood downtown, some urban animals trade personal space for the convenience of the city.

In England, rural foxes have roughly a square mile of territory to themselves, but city foxes share that same size space with up to 14 other animals. Urban rabbits don't have to share their space as much, but they have less space overall. A study in Germany found that rabbit burrows in the country are large, spread-out, and house many animals, like a rambling multifamily country estate, while city burrows are smaller, simpler, more evenly distributed, and home to fewer individuals, like an underground complex of studio apartments.

THEY CHANGE THEIR SCHEDULES

Some city animals will change their daily schedules to exploit urban resources or avoid conflict with humans.

In Bangkok, Thailand, and New York City sparrows have become night owls, staying out later to feed because the bright lights around buildings draw plenty of insects. Urban bears around Lake Tahoe also work the night shift, eating and moving more after sunset so there's less risk of bumping into people. In Germany, boars have adjusted their activities to humans' schedules.

During hunting season, the animals are known to commute from rural forest areas to the suburbs of Berlin during the weekend to avoid hunters, and then head back to the country during the week when the



forests are safer.

THEY MOVE AROUND AS AREAS GENTRIFY

rban sparrows in London are drawn to old run-down homes with holes or nooks and crannies to build nests in. As neighborhoods change and old houses are renovated or torn down and replaced, their winged residents often have to fly off and find a section of the city that's more accommodating.

In India, development is also leaving sparrows without an easy food source. In the past, the birds would pick at leftover bits of grain and vegetables as people cleaned and prepared food outside their home or at an open window. Now, more urban Indians have access to grocery stores and prepared and packaged foods, and sparrows have to fend for themselves more.

THEY'RE HEALTHIER

ith more resources and fewer predators, urban animals often have an easier life than their rural counterparts, and in several species that's reflected in their mortality rates and health.

Chicago's coyotes have an annual survival rate twice that of rural coyotes living outside of protected areas. Monkeys living in Jodhpur, India emerged largely unscathed from a severe drought in the early 2000s that cut rural populations by almost half. And while calling a rat clean is maybe going a bit overboard, city rats tend to carry fewer diseases and parasites than rural ones because, researchers think, they have less contact with livestock excrement from farms and their human neighbors don't harbor many parasites. \rightarrow



THEY GET BOLDER

outine exposure to humans lessens animals' fear of us, and the occasional handout teaches them to associate us with food.

In Los Angeles, this led to some problems after people started leaving plates of food out for animals in Griffith Park. Some coyotes had gotten used to the free meals and would approach people in the park, nip them on the shin as a way of asking for some food (the same way they do with fellow coyotes), and then sit and wait for a handout. Eventually, three coyotes that had gotten too used to humans and free snacks had to be killed to prevent conflicts.

ARCHITECTURE BECOMES WEAPONIZED

very year, Indianapolis sees an influx of starlings that Donovan says makes downtown feel like a scene out of Hitchcock's The Birds. Starlings crowd into city parks and congregate all over buildings, leaving park benches, windows and sidewalks "slippery with waste." The birds' droppings are acidic enough to eat away at limestone and copper and carries diseases and parasites.

To protect public property and public health, some buildings in the city are outfitted with a number of tools to discourage the birds from hanging out on and around them. There are rooftop sound systems that blare starling distress calls to scare them away, plastic nets and electrified wires that prevent the birds from landing on ledges, and even a large balloon decorated with eyes that the starlings find terrifying.

FIRE DEPARTMENTS PICK UP NEW SKILLS

orget the cat stuck in a tree. In Miami, the county fire rescue service deals with the city's populations of exotic snakes and other reptiles. Moving into animal control made sense for them, says Donovan, because they were already up and running 24 hours a day and most citizens called 911 when they spotted a weird or scary animal. The service has its own internationally renowned venom response unit that's equipped with the largest store of antivenoms in the U.S.

CITIES KEEP HUNTING SQUADS ON CALL

hen the wild boars that roam Berlin get sick or injured, they can get very aggressive and lash out at people, which often means they need to be destroyed. Gunning down a several-hundred-pound boar on a busy street isn't exactly easy, though, and the city police department is often reluctant to take on the task because of paperwork involved. So the city's wildlife officer regularly calls on a volunteer force of Stadtjägers, or city hunters, to contend with the boars in exchange for any meat that's fit to keep from the animals.

SOME GO DARK OR BUILD FOR THE BIRDS

ities can be a great place for birds to live, but for those that are just passing through, they can be a death trap. Chicago happens to lie in the path of the Mississippi Flyway, a major north-south route for North America's migratory birds, and the city's lights can distract and attract them, leading to collisions with buildings.

In one night, there can be as many as 1,000 collisions at one building, according to Chicago Bird Collision Monitors. In response, Chicago and other cities on migratory routes have implemented "lights out" programs where buildings keep their lights off at night. Other cities, like Toronto, require that new construction implement certain "bird-safe" design aspects, like exterior lights that don't point skyward and timers or motion sensors that switch interior lights off when the day is done.



VIRÍDIS

Viridis focuses on global issues. It outlines the greatest problems of our time and offers possible solutions. It also outlines a way forward with in-depth research and analysis, tools for citizen participation, and stories about real people working for a better world. The pandemic, climate change, financial collapse, poverty, and war leave many people feeling overwhelmed and hopeless. Our magazine hopes to empower people with the vision and the tools to create a healthy planet with vibrant communities.