Endangered earth

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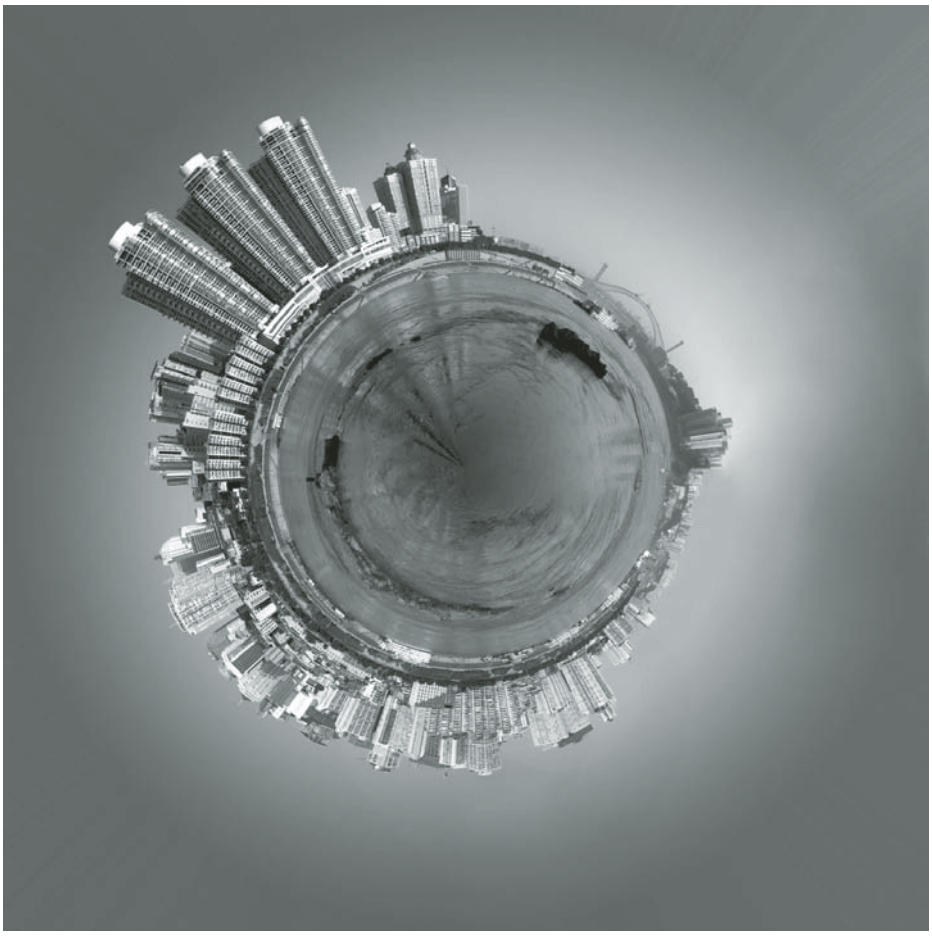
Owning Up to Overpopulation



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For more than 20 years the Center for Biological Diversity has worked to protect hundreds of rare and vulnerable species around the world from myriad threats. Now, in the face of a worsening planetary extinction crisis, the Center is launching a campaign to address an essential cause: unsustainable human population growth.

"The correlation between human population growth and the decline of Earth's biodiversity is undeniable," said Kierán Suckling, the Center's executive director.

Between 1800 and 1930, global population doubled from 1 to 2 billion people, while extinctions began to rise dramatically. Some species, such as the eastern woodland bison and Merriam's elk, were simply hunted out of existence.

As global population doubled again between 1930 and 1975, extinctions rose on a similar exponential curve. Compounded by rapidly evolving technology and skyrocketing rates of consumption, the negative impacts of the planet's burgeoning human population multiplied and extended to every ecosystem on Earth.

Today, overpopulation is at the root of virtually all threats to species

Overpopulation *continued on page 7*

ADVOCACY SPOTLIGHT

Miyo Sakashita, *Oceans Program Director*

Troubled Waters

There's an ominous threat brewing beneath the sea surface. It feeds on carbon dioxide from the atmosphere and it's growing more and more perilous. Sometimes called "global warming's evil twin," ocean acidification is poised to become the greatest threat to marine biodiversity unless we shift course and rapidly reduce carbon dioxide emissions.

Oceans cover three-quarters of the Earth's surface, and by absorbing carbon dioxide from the atmosphere they provide a buffer against global warming. Our oceans take up about 22 million tons of CO_2 each day—but unfortunately, relying on our oceans as a carbon sink comes at a cost.

Carbon dioxide reacts with seawater and alters its chemistry, causing it to become more acidic. This process—termed ocean acidification—also eliminates carbonate compounds that marine animals need to build the shells and skeletons they need to survive. Already, the oceans have become 30 percent more acidic since the Industrial Revolution. While the worst effects of ocean acidification may be a few decades away, some early warning signs are already emerging.

Coming to a coast near you: corrosive waters

On a research cruise in 2007, scientists placed bets on how widespread along the Pacific Coast they would find waters affected by ocean acidification. But all bets were off—because no one had guessed that *the entire U.S. coast has been affected by ocean acidification*. According to their survey, acidified waters are already upwelling onto the continental shelf along the coasts of California, Oregon, and Washington during certain seasons.

Similarly, researchers in Alaska found that acidification is already impacting Arctic waters, and project that by 2016 portions of the Arctic will become sufficiently acidified that the shells of mussels will dissolve faster than they can grow. These studies tell us that marine life is already being exposed to corrosive waters in some areas of our oceans.

Nearly every animal studied, from corals to fish, has shown an adverse response to ocean acidification.

Recently, shellfish growers on the Pacific Coast have reported a collapse of oyster production in waters that appear to be more acidic in recent years. Oysters may be the canary in the coal mine, giving us a preview of how acidification may affect a broad range of shellfish and fish.

Coral reefs are in double trouble, as the combined effects of global warming and ocean acidification may have already sealed their fate. Scientists are telling us that the world's coral reefs could be destroyed by mid-century as warming waters cause them to bleach and die, and corrosive waters erode and slow their growth. Calcification rates of corals have declined 14 percent since 1990 in the Australian Great Barrier Reef, and Charles Veron, a preeminent coral biologist, fears that the reef could be gone within 20 years.

Marine biologists have advised me to go see coral reefs before these "rainforests of the sea" vanish forever.

Yet the most concerning effect of ocean acidification is that it may undermine the very foundation of the marine ecosystem: plankton. Several types of plankton form thin shells that are at risk of dissolving in more acidic oceans. Studies have already found that the shells of some plankton are growing weaker and thinner in step with ocean acidification. Since plankton form the basis of the marine food web, this could spell trouble for every other ocean creature on up the line. As go the plankton, so goes the planet.

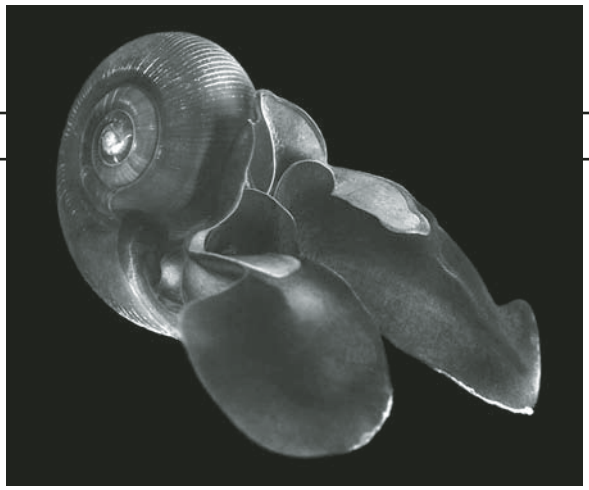
What will it take to battle this leviathan?

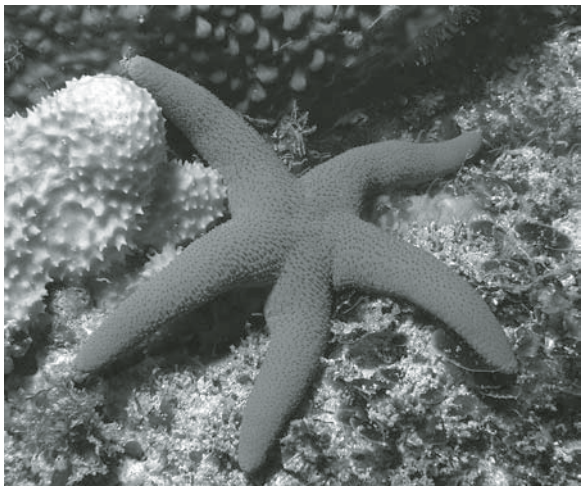
The science is undisputable: CO_2 is making our oceans more acidic. The key question remaining is whether we'll be able to reduce CO_2 emissions quickly enough to avoid the worst consequences of ocean acidification on marine ecosystems.

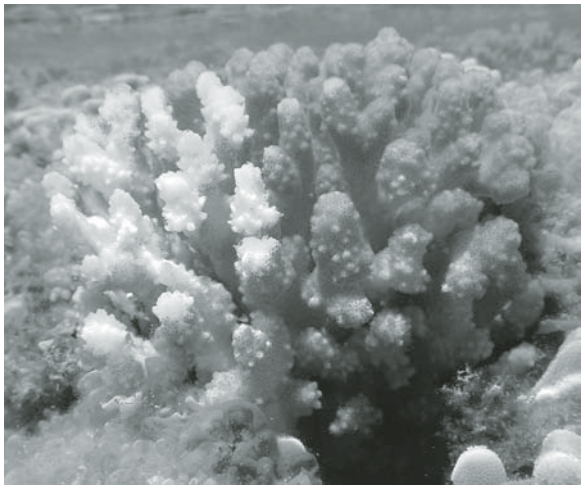
Leading climate scientists, including NASA's James Hansen, are telling us that we need to keep CO_2 concentration in the atmosphere below 350 parts per million (ppm) to avoid massive extinctions on land and in the sea from climate change and ocean acidification.

But right now, society is on the opposite trajectory. Carbon dioxide concentrations are currently at 387 ppm and rising. Without dramatic changes in our burning of fossil fuels, they have been projected to increase to 788 ppm by the end of the century, resulting in a 100-150 percent change in ocean acidity.

Alarmingly, in recent years, we have been overshooting even the worst-case scenario projections of CO_2 emissions calculated by the leading climate authority, the Intergovernmental Panel on Climate Change.







Humphead wrasse and bleached coral courtesy NOAA; seastar from Flickr Creative Commons/doug.deep; pteropod mollusk *Limacina helicina* © Alexander Semenov

Oceans Under Siege: Oceans provide a critical buffer against global warming, taking up about 22 million tons of carbon dioxide each day. But that CO_2 alters seawater chemistry to make it more acidic—in the process eliminating carbonate compounds that marine animals like pteropods (see top image, sea butterfly mollusk) and seastars need for shell and skeleton building. Warming waters bleach corals while acidification erodes them and slows their growth—a double threat that places the world's reefs at tremendous risk. Effects of acidification on these and other small organisms—including plankton—the foundation of marine ecosystems—signals trouble ahead for the whole ocean food web, from fish like the reef-dwelling humphead wrasse (bottom image), on up to marine mammals and seabirds.

Put simply, we have already crossed the danger point and are accelerating toward disaster. If there is to be a future for our oceans, our climate, and ultimately ourselves, we must sharply reduce our emissions.

Center taps Clean Water Act to turn tide now

While its consequences are severe, ocean acidification has received little public attention and virtually no political action. Since time is of the essence, the Center is working through our legal and policy channels to elevate the issue as a national priority.

New climate legislation and international agreements to reduce CO_2 emissions are a crucial step, but we must not wait too long to take action. So far, the climate bill in the halls of Congress needs strengthening, and a robust international agreement to reduce emissions may be a long wait.

Fortunately, the legal tools needed to address ocean acidification may already be at our doorstep.

The Clean Water Act, for example, is the nation's strongest law protecting water quality, and its goal is to eliminate water pollution no matter what the source. The Center has drawn on the fact that the Clean Water Act explicitly regulates changes in acidity, and we successfully petitioned the government to evaluate its water quality criteria so that it adequately protects marine life from ocean acidification.

Our hope is that invoking the Clean Water Act to regulate the CO_2 that causes ocean acidification will bring pressure to bear on the issue so that its worst effects can be avoided.

By raising the public and policy profile of ocean acidification, our goal is to make it a driver of efforts to reduce CO_2 emissions, and to compel regulators and lawmakers to address this most urgent of threats whenever and wherever possible.•

Miyo Sakashita heads up the Center's oceans team from our San Francisco office. Miyo has emerged as a lead advocate on this issue, nationally, and appeared in A Sea Change, *the award-winning 2009 documentary on ocean acidification.*

ON THE WEB:

Learn more about our work at the forefront of fighting acidification of our oceans: *www.biologicaldiversity.org/ocean_acidification/.*

Check out the award-winning documentary *A Sea Change*: *www.aseachange.net.*

PROGRAM NEWS

1 million Grand Canyon acres protected from uranium mining

Our tireless campaign to protect the Grand Canyon from the devastating effects of uranium mining gained traction in July, when Interior Secretary Ken Salazar announced a two-year halt on new uranium-mining claims and exploration on 1 million acres surrounding Grand Canyon National Park.

Even better: The Interior Department announced in August that it will undertake analysis on a proposal to extend and strengthen those protections for a 20-year period.

© Edward McCain

Grand Canyon

The announcements came after the Center chided Interior this summer for continuing to authorize new uranium exploration in defiance of a congressional resolution, passed in June 2008, calling for emergency withdrawal of the 1 million acres from uranium development. The Center filed suit against Interior in September 2008 for ignoring that resolution, and we've followed up with legal actions against continued approval of new uranium exploration and mining in May and September of this year.

Spikes in uranium prices have placed Grand Canyon lands and watersheds under dire pressure from thousands of new uranium claims, dozens of proposed exploration drilling projects, and proposals to reopen old mines. Uranium development threatens to damage wildlife habitat, industrialize iconic wildlands, and contaminate surface water and groundwater feeding water wells, seeps, springs, and the Colorado River.

The administration's actions come as Congress considers legislative mining reforms, including the Grand Canyon Watersheds Protection Act of 2009, which would permanently withdraw 1 million acres from mineral extraction, and legislation to reform the antiquated 1872 mining law, which exempts mines from tariffs, site cleanup, reclamation, and restoration.

Center fights on for wolves in Southwest, northern Rockies

This August, the Center petitioned the Obama administration to upgrade protection for Mexican gray wolves by officially recognizing them as a unique subspecies or distinct population.

Right now, the rare Southwest mammals are lumped together on the endangered species list with endangered gray wolves nationwide. No national wolf recovery plan exists, and the 1982 Mexican Wolf Recovery Plan doesn't identify the number or distribution of Mexican wolves that would constitute recovery—nor does it address wolf-science advancements made since 1982.

If granted, our petition will compel creation of a new recovery plan that would include demographic targets, identify new recovery areas, and incorporate lessons learned from the wolf reintroduction program in the Gila region straddling New Mexico and Arizona.

Also in August, the Center and allies took another step to save northern Rockies wolves, asking a federal court to block fall wolf hunts in Idaho and Montana. Idaho had authorized the killing of 255 wolves through hunting—30 percent of the state's total estimated wolves—while Montana OK'd hunting about 15 percent of its total wolves.

The request was part of our lawsuit to put northern Rockies wolves back on the endangered species list and out of the crosshairs of hunters, ranchers, and federal "predator control" enforcers.

Unfortunately, the judge declined to stop the fall hunts—but he did rule that the Service likely broke the law in removing the wolves' protections. We'll keep working to make sure those protections are back in place.

Feds fickle on national-forest protection

The outlook seemed sunnier for forests when our last *Endangered Earth* went to press, after a judge—thanks to a suit by the Center and allies—nixed a Bush attempt to rule-revise wildlife out of national-forest protections.

But two weeks after that judge struck down Bush's illegal and inadequate regulations governing the national-forest system, the Obama administration *reinstated* regulations previously also found unlawful. The reinstated rules do away with essential wildlife protections, including safeguards for populations of forest species from logging, road-building, grazing, and other projects.

Meanwhile, Obama's Forest Service has proved wishy-washy on upholding meaningful protections for the 58 million national-forest acres supposed to be protected as "roadless."

Tom Kogut/USDA Forest Service

Forest-dependent spotted owl

First, Obama called a "time-out" on most roadless-area destruction, promising that the secretary of agriculture would closely examine plans for any new road construction or logging

within remaining roadless areas before approving those plans (suggesting approvals would be rare).

But less than two months later, Secretary of Agriculture Tom Vilsack casually approved logging on nearly 400 roadless acres in Alaska's Tongass National Forest. And the Forest Service continues to allow logging in some Northeast roadless areas because they weren't inventoried and dubbed "roadless" until after the 2001 Roadless Area Conservation Rule.

To broadcast the urgent need for strong, nationally consistent roadless-area protections, in July the Center released an important report called *Saving Our Natural Legacy: The Future of America's Last Heritage Forests*.

Fortunately, a court affirmed the spirit of the 2001 Roadless Rule this August, upholding safeguards for 50 million roadless acres. The decision strikes down a Bush rule leaving these areas vulnerable and frees President Obama to fulfill his pledge to "support and defend" the Roadless Rule. Hopefully, he'll straighten his path and make these protections permanent.

Sunshine State species win, still need habitat safeguards to survive

September was an eventful month for three Florida creatures in need of federally protected habitat.

Thanks to a Center lawsuit, the smalltooth sawfish—a shark relative with a unique serrated snout—earned protections in more than 840,000 acres of waters along Florida's southwestern coast. Though the fish was listed as endangered in 2003, the National Marine Fisheries Service didn't make a move toward protecting habitat until after the Center sued in 2007; meanwhile, coastal development continued in sawfish swimming grounds. The fish is now at about 5 percent of its former range and population.

The diminutive Cape Sable seaside sparrow, an Everglades native, has been federally protected since 1967, but Bush-

USFWS

Florida panther

administration political meddling left it with less than half its original protected habitat. The Center and the Florida Biodiversity Project sued in September to regain more than 70,000 protected acres for the rare sparrow.

Finally, the Center petitioned to earn protected critical habitat for the Florida panther, the iconic state mammal. Like the sparrow, the beautiful and powerful feline has been federally protected since 1967 but still lacks critical habitat. Given that the greatest threats to the panther are habitat loss, fragmentation, and degradation—all driven by Florida's ever-burgeoning human population—that obviously won't do. Our petition seeks protection for more than 3 million acres.

Hawaiian monk seals get expanded habitat

The Hawaiian monk seal—one of the most endangered marine mammals on the planet—will soon have more room to forage, rest, and rear young.

The Center and allies petitioned the National Marine Fisheries Service in July 2008 to expand the seal's previously protected habitat on the northwestern Hawaiian Islands as well as designate new critical habitat on the main islands. This June, the agency announced plans to do just that.

Limited food availability, entanglement in fishing gear, predation, and disease have taken a heavy toll on this federally endangered species in the past 50 years—only 1,200 seals survive today.

Global warming, too, has hit the monk seal where it hurts, unraveling delicate marine ecosystems and flooding pupping beaches along Hawaii's northwestern chain of small islands and atolls where the species once thrived. As that habitat gives way to rising seas and seal numbers dwindle, protecting critical habitat

Monica Bond/Under permit of NOAA

Hawaiian monk seals

on the main islands—where foraging is better and seal numbers are increasing—is now crucial to the species' survival.

In the coming months, the Fisheries Service will propose revisions to the monk seal's current critical habitat and solicit public comments. Rest assured we'll track developments closely to make sure these Hawaiian natives get the habitat they need to recover.

Victory abroad for 31 birds, pair of rare plants

The Center reached settlements with the U.S. Fish and Wildlife Service this summer to protect two Virgin Islands plants and a band of brilliant birds across the globe.

First, in June, the U.S. Fish and Wildlife Service responded to a Center lawsuit by finally agreeing to protect 31 of Earth's most imperiled birds. The Service will publish final Endangered Species Act listing determinations for six birds from New Zealand, Fiji, Ecuador, and Papua New Guinea, and will propose listings for 25 other birds, from South America's black-hooded antwren to Southeast Asia's salmon-crested cockatoo.

PROGRAM NEWS

The Center first sued for 73 imperiled international birds back in 2003; our recent warning of more court action spurred the Service's positive move for almost half those species. The birds are in danger from a host of threats; Endangered Species Act protection will help draw worldwide attention to their plight, make available U.S. expertise and funds, and compel strict regulation of their import and export.

© Arthur Grosset

Black-hooded antwren

In August, two seriously endangered plants native to the Virgin Islands—*Agave eggersiana* and *Solanum conocarpum*—were finally slated for protections, also thanks to Center efforts.

Agave eggersiana, a large-flowered perennial found only on eastern St. Croix, can grow to be from 16 to 32 feet tall; *Solanum conocarpum*, native only to the island of St. John, is a thornless, flowering shrub that can reach nine feet in height and may be the nearest to extinction of all endemic Virgin Islands plants. Both species are threatened mostly by habitat loss and feral animals.•

With lead ban in place, Center defends California condors at Tejon Ranch from shameful sprawl

Scott Frier/USFWS

Tejon Ranch is the largest stretch of unprotected wilderness remaining in California—a spectacular refuge not only for endangered California condors but for dozens of other rare and vanishing species, some of which live nowhere else on Earth.

To stop condors from being poisoned and killed as they forage on lead-shot carrion, both in Tejon and beyond, the Center's campaign banned most lead ammunition from condor habitat across the state. Now we're taking the fight national. We're close to stopping lead poisoning in Arizona's Grand Canyon and are setting our sights on a nationwide ban on lead ammunition—in the face of intense lobbying, of course, from the National Rifle Association.

In Tejon, we continue to defend the huge birds from their other worst enemy: the Tejon Ranch Corporation, whose largest shareholder is the billion-dollar behemoth TAREX. The company is gunning to build the largest development in California history in the very heart of essential condor habitat.

Carrying out plans for a sprawling luxury development on Tejon—hotels, golf courses, 23,000 homes, and 14 *million* square feet of malls—would amount to dropping a city into the middle of the wild. It would devastate endangered species from condors to kit foxes to red-legged frogs.

The Tejon Ranch Corporation cares far more about profit, and it's flexing its financial muscle to buy off scientists and bury the details of its secret agreement with the government—struck after it sued to stop the condor reintroduction program altogether.

Other environmental groups, who initially stood with us to stop development of Tejon Ranch, have peeled off one by one. But we're continuing to fight, as the company releases the "habitat conservation plan" that would allow it to harm the condor and 25 other imperiled species at Tejon.

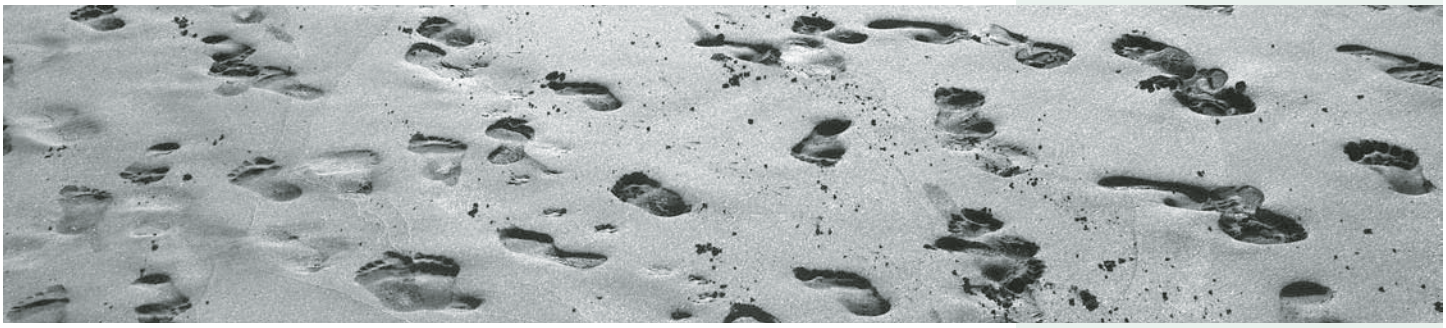
We exposed the company's contracts to silence scientists, and we later made sure the media didn't ignore the eight esteemed condor scientists who, in July, condemned the proposed development and conservation plan as deeply damaging to condors. In August, threat of legal action from the Center forced the company to release hidden documents detailing its pact with the government.

To stop the development from moving forward, we will have to file suit again this fall.

And we have to win, or forever lose one of the last, best places in California—as well as the condor, a prehistoric icon of the American West that would've gone extinct three decades ago if not for heroic efforts to breed the animals and release them into the wild again.•

ON THE WEB: To beat back the NRA and Tejon Ranch Corporation, we've set up the Condor Legal Defense Fund. You can contribute at *www.biologicaldiversity.org/savecondors/*.

CRITICAL EFFORTS TO REDUCE CARBON FOOTPRINTS MAY IN THE END BE OVERWHELMED BY TOO MANY FEET.



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Overpopulation *continued from cover*

around the globe. The fallout of 6.8 billion human consumers has become an inescapable challenge for the rest of the Earth's inhabitants. We still overharvest many species, particularly those of the oceans, but now we also compete with other species for available water, sustenance, and habitat.

Meanwhile, our waste products cover the Earth, contaminating soils and fresh water, clogging the oceans, and fundamentally changing the ecology of the planet and the biology of its species. The prevalence of just one of our wastes, greenhouse gases, has dramatically altered the chemistry of the atmosphere and oceans, causing global climate disruption and ocean acidification.

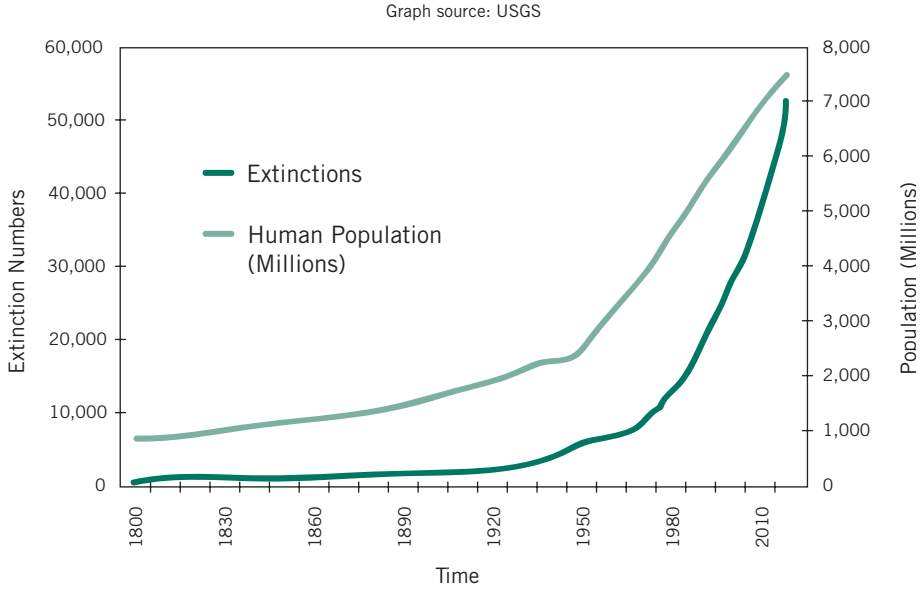
The United States is a major factor in the population problem. With just over 300 million people, the U.S. ranks third behind China and India among the nations of the world. But extremely high consumption levels in the U.S. give its population a disproportionate share of the global impact. For example, the carbon footprint of a U.S. resident is double that of someone in Europe and more than 10 times the average in developing nations.

In the near term, global population dynamics will only worsen. Human population is projected to

continued on back page

Species Extinction and Human Population

Graph source: USGS



Overpopulation outreach: from social justice to safe sex

The Center's overpopulation campaign will advocate for solutions to unsustainable population growth. For example, education and empowerment of women, along with universal access to birth control and family planning, have proven very effective in bringing down fertility rates.

We're developing new Web resources making clear the connection between human population growth and biodiversity loss. We've added Web pages on overpopulation as it relates to our campaigns on climate change, extinction, and oceans, and we'll soon add more.

We're also working media angles that aim to push this issue into the mainstream where it belongs. Soon we'll launch our endangered species condoms project—a humorous and creative way to highlight the connection between overpopulation and saving species.

Condom packaging will feature endangered species art along with witty slogans and information on the extinction crisis, designed to generate media buzz and change perspectives on reproduction.•

On-the-ground threats compound warming

While long-awaited climate legislation crawls through Congress, we're seeing Arctic sea ice retreat and our last forests fall. The Center is heeding the alarm and working to fight global warming from the ground up while we push for stronger laws.

Climate-changing clearcuts challenged

A trio of groundbreaking lawsuits by the Center in August forced timber giant Sierra Pacific Industries to abandon plans to clearcut a sizeable swath of Sierra Nevada forest—and, it appears, raised the profile of California clearcutting and its contribution to the climate crisis just in time.

The lawsuits, filed against the California Department of Forestry for approving Sierra Pacific plans to log more than 1,600 acres without addressing the CO_2 emissions that would result from the clearcutting, were the first known suits to challenge logging in connection with climate change.

Undisturbed forests generally act as carbon sinks, continuously absorbing CO_2 from the atmosphere, but logging can turn a patch of forest from a carbon sink into a carbon source. Clearcutting, already devastating to forests through its damaging effects on wildlife and water quality, also generates more greenhouse gases than any other logging practice.

Courtesy Lighthawk, Lander, WY/Ebbetts Pass Forest Watch, Arnold, CA

Clearcut and Trade: Center suits forced timber giant Sierra Pacific Industries to abandon plans to clearcut wide swaths of the Sierra Nevada similar to this one in the Mokelumne watershed, previously logged by the company. But now the state of California wants to count clearcutting as a greenhouse gas *reduction* measure and pay off timber companies like SPI for carbon credits.

The California Department of Forestry is required to analyze the greenhouse gas emissions impacts of all logging plans it approves on private lands in the state, to ensure those plans comply with the California Environmental Quality Act. Instead of calculating carbon emissions from Sierra Pacific's actual logging plans before approving them, however, the department vaguely ventured that the company would replace enough trees over a 100-year time frame to offset its clearcutting activities.

While our first set of legal challenges successfully stopped the three Sierra Pacific plans, it's likely our work on this front is just beginning. The company still has more than two dozen similar projects in the queue, which together seek approval to clearcut more than 12,000 acres of California forest.

And the story took a new nonsensical twist in late September, when Sierra Pacific announced a deal that might pay the company millions for carbon credits based on its forest landholdings. The company is the first in line to profit from the California Air Resources Board's adoption, a week earlier, of new rules for assessing the carbon impacts of forest practices—including a bizarre measure allowing clearcutting to qualify as a greenhouse gas *reduction* method and thus earn carbon credits.

Of course, as our California climate advocate Brian Nowicki points out, "A clearcut is about as beneficial to the climate as a new coal-fired power plant."

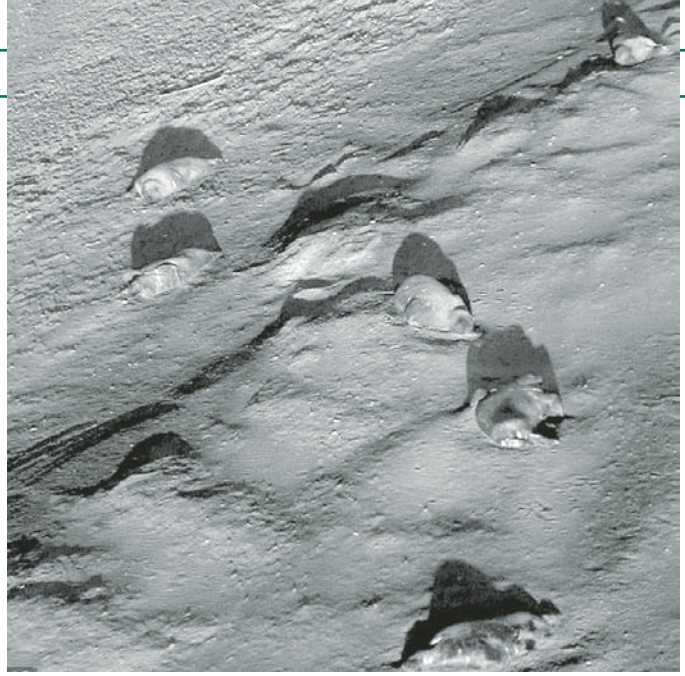
The Center was among the coalition of groups opposing the new rules, and we'll continue to fight moves to illegally approve—and reward—clearcutting instead of addressing its climate impacts.

Amid tragedy, walrus one step closer to protection

The same September week that Center work moved the Pacific walrus closer to protection, a chilling reminder arrived from the Arctic that we can't protect its sea-ice habitat soon enough.

Early in the month, in response to a scientific petition and lawsuit by the Center, the U.S. Fish and Wildlife Service announced it would conduct a full status review to determine whether the Pacific walrus should be protected under the Endangered Species Act. Under court-ordered settlement, that decision is due no later than September 2010.

Several days later, on September 14, more than 100 walruses—apparently mostly calves and yearlings—were reported dead on the north coast of Alaska along the



Tony FischBach/USGS

Arctic Alarm Sounding: Dead walruses dot the shore on Alaska's north coast, after the early disappearance of summer sea ice drove unusually large numbers of walruses to shore. In such cases, young walruses are especially vulnerable to death by trampling.

shore of the Chukchi Sea. On October 1, U.S. Geological Survey biologists confirmed that the 131 walruses died from being stampeded—a greater danger to young walruses when disappearing sea ice forces unusually large numbers of the animals to congregate on shore.

Indeed, just two days before the reported deaths, the National Snow and Ice Data Center announced that summer sea-ice extent in the Arctic reached its third lowest year on record in 2009—behind 2008 and 2007, the lowest year on record.

In 2007, up to 4,000 walruses, mostly young animals, were reported crushed to death by stampedes after the early and extensive retreat of summer sea ice pushed large herds onto the Russian and Alaskan coasts.

As in 2007, this summer thousands of walruses were seen crowded in haulouts along the coasts, including at Icy Cape, the site of the most recent stampeding deaths.

Walrus survival is intimately connected to Arctic sea ice, which they use as a platform for resting between trips to forage for clams and mussels in relatively shallow waters over the continental shelf, as well as for giving birth and nursing calves. Walruses also rely on the safety of late-summer sea ice for nursing and as a resting platform between foraging bouts. When the sea-ice edge disappears from their foraging areas, large numbers of walruses are forced to come to shore. There, they are limited in how far they can travel to forage—especially females with young—and so can run out of food.

The species is also threatened by planned oil development in the Chukchi Sea, but loss of Arctic sea ice to global warming is the biggest threat to its survival.

"The deaths of these walruses is another wake-up call that we will lose the Arctic if we continue on our current course," said Center biologist Shaye Wolf. "Every moment that Washington delays in taking strong action on climate change, it robs the walrus, the Arctic, and its people of a future."

Suit targets pesticide poisoning of polar bears

The Center has long worked to protect the polar bear from the two biggest threats to its habitat: oil and gas drilling, and melting of sea ice that is critical to polar bear survival. But another silent crisis threatens the polar bear, and we're making that a new front in our fight to save the species.

Pesticides approved for use in the United States make their way to the Arctic via the atmosphere, ocean, and transport by living organisms. As they make their way higher in the food web, they reach ever more toxic concentrations. Polar bears, as the apex predators of the Arctic, are subject to some of the greatest pesticide concentrations.

Pesticide poisoning in polar bears has been linked to suppressed immune function, endocrine disruption, shrinkage of reproductive organs, hermaphroditism, and increased cub mortality. Human subsistence hunters in the Arctic, who share the top spot in the food web with polar bears, also face risks from exposure to these contaminants.

"If we do what is necessary to protect the bear from pesticides, we will also be protecting the Arctic ecosystem and the people that depend upon it," said the Center's Rebecca Noblin from Anchorage.

So this summer, the Center warned the Environmental Protection Agency that we would file suit if the agency continued to fail to consider impacts to the polar bear from pesticides it has approved for U.S. use, and at *Endangered Earth* press time we were preparing to move forward with that suit. The agency is required to examine such impacts on species protected by the Endangered Species Act; the polar bear was listed as "threatened" under the Act in 2008 following a scientific petition and litigation by the Center.

At a recent meeting in Copenhagen, the world's leading polar bear scientists declared contaminant poisoning one of the leading threats to the bears.

We've brought several successful lawsuits against the EPA over impacts of pesticides on imperiled wildlife in the lower 48 states. This campaign marks our first-ever legal challenge to pesticide registrations due to their impacts in the Arctic.•

ON THE WEB:

www.biologicaldiversity.org/clearcutting_and_climate_change/

www.biologicaldiversity.org/saving_polar_bears_from_pesticides/

www.biologicaldiversity.org/legislating_for_a_new_climate/

Climate bill is far from the change we need

You can't always get what you want,
But if you try sometimes, you just might find
You get what you need.

Bill Snape, Senior Counsel
Center for Biological Diversity

Habitat: Washington, D.C.

Any rock-and-roll aficionado knows these Rolling Stones lyrics. But most probably don't realize that Chuck Leavell, Stones keyboardist and Georgia tree farmer, has formally entered the global warming debate. In fact, it was Leavell's visit inside the Beltway this past summer that marked just how mainstream the issue has finally become.

Leavell's message to Congress: Forest landowners should get paid for contributing to greenhouse gas reduction as part of a cap-and-trade system—a key component of climate legislation working its way through Congress this year.

Sounds good. In theory, forest lands absorb carbon from the atmosphere. In practice, however, much hinges on how those lands are managed: Witness California's recent proposal to pay off the timber industry for carbon credits for clearcutting forests on its landholdings in the state. (*See story page 8.*)

And between theory and practice lies the wide crevasse between the Senate, which recently unveiled its own version of the climate bill passed by the House in June, and the climate bill we *need*—the one that will steer us off our current course toward catastrophe, and fast.

The newly revealed Senate draft bill is marginally better than the House bill—which was itself woefully inadequate to arrest global warming. Now, the Senate's iteration must wind its way through a labyrinth of committees, come under fire from industry critics, and negotiate a minefield of payoff demands from those same industries for doing business in ways that may actually *worsen* the crisis at hand.

But let's look at what we have in hand: The Clean Energy Jobs and American Power Act, as introduced by Senators Barbara Boxer and John Kerry September 30.

Against industry pressure, the Boxer-Kerry bill preserves the power of the Clean Air Act—a powerful tool for 40 years in the fight against air pollution—to regulate greenhouse gas emissions. That's a victory for the Center's persistent advocacy and the commitment of our supporters, who have helped these many weeks to urge the Senate to drop the House bill's language repealing the Clean Air Act.

The Boxer-Kerry bill also ups emissions reduction targets from the House bill's goal of a 17 percent reduction from 2005-level greenhouse pollutants by 2020, to a 20 percent reduction over the same time frame.

The difference is slight, in light of scientific consensus, which says we must reduce CO_2 emissions to no more than 350 parts per million to avert catastrophic change to the world as we know it. To get to 350 parts per million (we're currently at 385), leading climate scientists have called for reductions of approximately 40 to 45 percent below 1990 levels by 2020—a far more ambitious target than either the House or Senate bills has set.

As for cap and trade—that framework that allows polluters to keep polluting and feel good about it, as they pay for "offsets" that frequently do nothing to arrest global warming and in fact may fuel the fires? Kerry claims his is not a "cap-and-trade bill," but a "pollution-reduction" bill. But rebranding aside, the bill still rests on a system of tradeable offsets that threatens to turn the final legislation into a sieve of loopholes.

And the Clear Air Act is far from safe. No sooner had the rally introducing the bill subsided than Big Oil and Big Coal started taking new shots at the Act, which could still be gutted by the final bill.

In short, there's a long, dirty battle ahead.

That's why the Center's Climate Law Institute has launched an unprecedented campaign to keep the Senate honest, leading a broad coalition to call for a substantive and powerful bill. We've garnered more than 41,000 signatures on our petition to that end, sent a letter to the Senate signed by nearly 400 environmental, religious, social justice, and other civic groups, and coordinated personal deliveries of that letter to Senate district offices across the country. Our fact sheets, reports, and bill analyses are updated frequently for activists around the country as the legislative battle progresses.

Next stop: Copenhagen, site of this December's major international conference on climate change—and, many believe, our last chance to shape a strong global response to the climate crisis in time for that to matter. Our own Kassie Siegel and Brendan Cummings will be in attendance, representing the Center as we do our part to put pressure on the United States to end business as usual and to meet this challenge as vigorously as we, as a nation, helped create it.

It's unlikely that climate legislation, in any shape, will pass the Senate before Copenhagen. So in the meantime, we continue to keep pressure on the Obama administration and its Environmental Protection Agency to use the authority of the Clean Air Act—which already has more teeth to reduce greenhouse gas emissions than the House or Senate bills.

And they have: We've recently applauded Obama's EPA for announcing the first national plan to regulate greenhouse gas emissions from cars, light-duty trucks, and sport-utility vehicles, as well as a plan to regulate large-industrial facilities that emit more than 25,000 tons of greenhouse gas emission in a year.

Can we get to the change we need from there? The jury's out—but we're certain that anything less isn't really an option.•

Site gives you 350 reasons to act

If you don't yet know why 350 is the most important number on the planet, the Center for Biological Diversity has 350 reasons why you need to find out, now. And you're one of them.

To dramatically illustrate why we must reduce carbon dioxide in our atmosphere to no more than 350 parts per million, we've created *350 Reasons We Need to Get to 350*—a Web-based photo installation of 350 species we may lose to global warming if we don't act soon and strongly.

The project features some familiar faces, like the iconic polar bear—and notably, our own species: *Homo sapiens*. It's also a broad introduction to scores of lesser-known creatures affected by the climate crisis. Don't know what a pteropod is, much less why global warming threatens its survival? You can remedy that, or search for species in your region, by checking out *www.biologicaldiversity.org/350_reasons/*.

Better yet, get involved. Our Web installation is part of 350.org's International Day of Climate Action October 24—but you can still take action after that date.

First, use the sample letter on our site to send a message to President Obama telling him why we need to get to 350.

You can take further action by taking a photo of yourself with the 350 message from our site, on behalf of one of the plants and animals featured in our project. Your photo will become part of the Center's contribution to a collection of similar images from around the globe that 350.org will deliver to media and world leaders—including at the United Nations climate conference in Copenhagen this December. We'll also be uploading your images to our Web site—send them to our climate campaign coordinator Rose Braz at *rbraz@biologicaldiversity.org*.•

Join the Center's Frostpaw in sending our 350-reasons message to world leaders.

Bid with your lid for the Center

Every year through its Profits for the Planet program, organic yogurt company Stonyfield Farm puts 10 percent of its earnings toward work to protect and heal the environment—like the Center's. This fall, Stonyfield will donate a whopping $100,000 of its funds to three select organizations, including—you guessed it—the Center, with the money to be divvied up according to the number of votes each group earns. And we hope the Center will earn the most.

Here's how it works: In October, specially marked Stonyfield Farm yogurt lids will display a message about the three chosen groups. Every time organic-yogurt lovers lick the lid from a Stonyfield yogurt cup, they can read a bit about the Center. Then, they can vote online with a simple click or use the code found on the yogurt lid to cast multiple votes. Since the codes are part of Stonyfield's reward program, voters will also earn points they can redeem for eco-friendly gifts.

Earning prizes, helping the Center and the planet, and getting yogurt to boot? Sounds like a win-win-win to us.

And we have to give props to Stonyfield Farm: Besides making good organic yogurt and donating profits to environmental nonprofits, the company is doing a lot itself for the environment. To fight climate change, Stonyfield measures its energy use and greenhouse gas emissions, reduces those emissions to the max, and uses carbon offsets. Stonyfield also minimizes its solid waste, makes environmentally conscious packaging choices, and educates the public about environmental issues.

Of course, our partnership with Stonyfield Farm isn't the first time we've linked up with businesses that want to help us help the environment. In 2008, the support of Working Assets and CREDO Mobile customers earned us a $62,000 donation from the companies. This year, gift company Kikkerland is helping the Center erase extinction by giving us 2 percent of profits from its endangered species erasers (*www.kikkerlandshop.com/ensper.html*). We'll also be partnering with 41pounds.org, a business that reclaims your mailbox from wasteful junk mail and donates much of your payment to environmental nonprofits.•

ON THE WEB: Vote for the Center through Stonyfield Farms' Bid With Your Lid program at *www.mystonyfieldrewards.com/bid.*

Endangered earth

Endangered Earth is the quarterly newsletter of the Center for Biological Diversity, a 501(c)3 nonprofit organization dedicated to protecting endangered species and wild places.
Contributions are tax-deductible.

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Overpopulation *continued from page 7*

reach about 9 billion by mid-century, and could go as high as 15 billion without significant and sustained efforts to reduce it. In the United States, the fertility rate has begun to climb again after falling or remaining level for several decades, and now stands at its highest point since 1971. The U.S. population could reach 450 million by mid-century: a devastating number, considering our bloated—and increasing—levels of consumption.

And the ripple effects of overpopulation will be felt for many years to come. A recent study determined that the "carbon legacy" of a child born today, taking into account the emissions that will be generated by that child's descendants over time, amounts to 20 times the emissions that can be saved through implementation of available conservation measures.

"Critical efforts to reduce carbon footprints may in the end be overwhelmed by too many feet," said Randy Serraglio, the Center's conservation advocate leading the overpopulation campaign.

Despite the grave implications and mathematical clarity of this situation, for many years overpopulation has been something of a taboo subject among conservationists. In an effort to break the silence, the Center joined more than 200 scientists and activists earlier this year in the Global Population Speak Out, pledging to promote awareness of unsustainable population growth and its consequences for our planet.

One prominent population activist hailed the Center as a "true groundbreaker among environmental groups" for undertaking this work. Our members and supporters seem to agree—we've received an overwhelmingly positive response to the launch of the overpopulation campaign. "Thank you for having the wisdom and courage to deal with the cause of what's going wrong with this planet and not just the symptoms," said one supporter. Another lauded us for addressing "the big pink elephant in the corner that no one wants to acknowledge."

We see this campaign as not just a good idea, but an essential part of our work. "Without successful efforts to address the problem, human overpopulation threatens to undermine all of the work that we do," said Serraglio.•

ON THE WEB:

The Center is blazing new territory with our campaign to address overpopulation. Learn more at *www.biologicaldiversity.org/overpopulation/.*