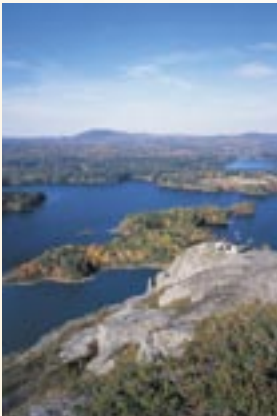


The Public Benefits of Conserved Lands



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Cover image: ©2005 JimDugan.com

The cover image encompasses six different conserved properties: Camden Hills State Park is in the foreground, and the midsection lands (bordering Megunticook Lake) include a preserve owned by the Maine Chapter of The Nature Conservancy, a preserve owned by Coastal Mountains Land Trust, and three private parcels whose landowners have conservation agreements with Coastal Mountains Land Trust.

The Public Benefits of Conserved Lands



WARREN WHITNEY

Maine Land Trust Network

a program of



Maine Coast Heritage Trust

A Statewide Land Conservation Organization

INTRODUCTION

Value beyond Measure



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Calculating the value of natural lands typically involves measurements of their financial worth—the appraised market value, the listing price, the current tax assessment. These fiscal measures help us to negotiate the transfer of real estate, but they fail to account for many of the land values that matter most.

It's hard to put a price on the joy one feels while walking in a scenic woodland or selecting fresh produce from a local farm stand. It's harder still to measure how a given forest or meadow improves air quality, moderates climate change and protects drinking water. Yet these benefits from natural lands enhance our quality of life.

Many of the benefits that accrue from protected lands are not limited to those who own the land: conserved parcels often provide the greater community with wildlife habitat, scenic vistas, opportunities for outdoor recreation, and natural resources that stimulate the local economy. Maine residents and visitors depend upon the natural assets supplied by permanently protected parcels—whether the land is conserved and maintained by private landowners, held as a preserve by a nonprofit land



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trust, or managed as a park, refuge or multiuse area by the government.

Direct experience teaches us that conserved lands have value in and of themselves. Preserved natural settings make our communities more appealing, enriching the lives of residents and creating a desirable environment for workers and visitors. Protected properties stimulate local growth without requiring costly municipal services that can increase taxes. Conserved lands also foster public health through an array of ecological services. The collective worth of these contributions is undeniable; land protection is one of the best investments that a community can make.



RICH KNOX

Sustaining Recreational Traditions



Outdoor recreation benefits Maine's economy, which is increasingly reliant on tourism revenues.

Recreational opportunities are among the most tangible benefits that conserved lands offer. Whether playing in a neighborhood park, camping in a remote preserve, or fishing in a free-running river, people rely on natural areas to help them renew their spirits, challenge themselves, and gain new perspectives. A poll completed for the President's Commission on Americans Outdoors found that the top criteria among those seeking outdoor recreation were "natural beauty" and "quality of views." Much of Maine's appeal to year-round residents and its lure as "Vacationland" lies in the recreational possibilities offered by its spectacular natural settings.

Nature-based travel, one of the fastest-growing sectors of global tourism, holds great potential to strengthen Maine's economy without the environmental costs associated with other industries. Many of Maine's 48 million annual visitors come to enjoy the state's natural beauty. According to the State Office of Tourism, visitors list "outdoor recreation" and "touring" (which includes beach visits, whale watches and other outdoor pursuits) as their top two travel categories. Tourism provides roughly 58,000 jobs and generates nearly 5 percent of all Maine's economic activity. A University of Maine study found that hunting, fishing and wildlife-viewing alone contribute \$1 billion of the state's total tourism revenues of \$2.5 billion.

A Small Community with a Grand Vision

The hamlet of Grand Lake Stream draws more than its name from the swift-moving river that runs through town. Its economic health depends on visiting fly fishermen, who are attracted by the stream's landlocked salmon and trout.

"For decades, the sporting community here took water access for granted," says Jeff McEvoy, who owns Weatherby's, a local fishing camp. That changed in 1999 when a paper company with lands on both sides of Grand Lake Stream proposed building a 26-lot subdivision—a plan that would have "changed forever the nature of recreational fishing on the river," McEvoy reflects. An alliance of guides, sporting camp owners and fly fishermen formed and, with help from many organizations and the State's Land for Maine's Future Program, secured a combination of lands and voluntary landowner agreements to keep the stream's shores undeveloped.

A more ambitious regional vision is taking shape, supported by local sporting camp and business owners, to protect 342,000 acres of forest land and lake shore stretching north from Grand Lake Stream to New Brunswick. "People saw they could actually do this kind of project themselves—with support from others," McEvoy says. "This project solidified my investment in the community. The collective commitment to conservation here helped persuade the bank, too [in financing the camp], since having a pristine resource guarantees the viability of my business."

Land conservation surrounding Grand Lake Stream has helped protect the livelihood of many local residents who run sporting camps and guiding operations.



Providing Community Returns



© SARA GRAY



MICHT

Residential developments can cost towns more than productive farms or forest land because of the increased services they require.

Many people assume that residential development increases a town's tax base, generating revenues that outweigh any added cost of municipal services. Studies done in Maine and throughout the country contradict this assumption, revealing that many new housing units typically cost taxpayers more than they contribute in tax revenues. Protected lands, in contrast, can save municipalities money because they don't require services such as water, sewer and schools.

Conservation projects rarely have a major tax impact on other property owners in town, because most protected lands already had low tax valuations (through enrollment in the State's Tree Growth or Farm and Open Space tax programs). Studies in Maine have shown that permanently conserving a parcel valued at \$500,000 would increase taxes for an average local homeowner by less than \$5 a year.

When research showed that increased service costs from a proposed development would outweigh tax revenues, Bowdoinham residents voted to support purchase of development rights on a 308-acre farm—reserving the land for agricultural use. “Undeveloped land is the best tax break a town has,” observed George Christopher, a town selectman at the time. More than two dozen Maine towns have reached a similar conclusion, investing in land conservation through municipal bonds and other measures.

Payback from a Municipal Land Bond

In the decade preceding 2000, the population of Falmouth grew from 7,600 to 10,310, and home construction projects peaked at around 100 per year (twice the town's historical average). New development, coupled with a "baby boomlet" of school-age children, drove up the costs of services and property taxes, creating what Falmouth Town Manager Doug Harris calls "a pretty negative reaction to growth." Townspeople feared that Falmouth might lose the rural character and recreational opportunities that made it an appealing place to live.

In response, local residents worked with the Town to secure a \$1 million land bond for farmland and recreational open space. "Having residents come forward and say 'This is what we want for our community,'" says Harris, "was much more effective than if the Town had taken the lead." That bond funded open space for trails, wildlife habitat and recreational fields through several acquisitions, including development rights on one farm and all of a second farm (with a leaseback to the farmer for continued productive use). On two projects, Falmouth leveraged State matching funds through the Land for Maine's Future Program. When a second \$1.5 million land bond went before voters, it won by an overwhelming 70 percent. "People realize that these lands are a great asset to the community," Harris says, "helping us maintain the character and quality of life that we enjoy."

By conserving agricultural settings like Wilshore Farm, Falmouth residents helped protect their community's rural character.



Supporting Farms, Forests, and Working Waterfronts



Conservation agreements can be used to protect working stretches of coast, helping to sustain Maine's maritime economy.

Working farms, forests and waterfronts may seem like timeless elements of Maine's landscape, but they are highly vulnerable to change. Across the state, new houses are sprouting up on rural and shoreline properties—putting an end to the land's productive use. The State Planning Office reports that between 1992 and 1997, 33,500 acres of rural land were developed *each year*, a rate four times that of the previous decade.

“This is a transitional time in the history of Maine's working lands,” says Commissioner of Agriculture Robert Spear, noting that the amount of productive farmland in the state has declined by more than 50 percent since 1964. “To keep lands and waterfronts working in perpetuity will take a strong commitment from communities and significant investments.”

Consumers increasingly seek out fresh local foods: the number of farmers' markets in Maine grew from 18 in 1980 to 65 in 2003. Yet farmers can meet this demand only if their lands remain in productive use. Protecting land by selling development rights to conservation organizations helps farmers and forest owners keep working their lands in the face of rising property values.

Conservation agreements also can help keep shoreline lands affordable—ensuring that fishermen and harvesters have access to the water. Protecting access helps bolster the local economies of coastal communities and sustain the collective infrastructure needed to support healthy marine trades.

Keeping Maine's Agricultural Base

Keewaydin Farm was once one of several active dairy farms bordering the Cathance River in Bowdoinham. Owners Malcolm and Lucille Jewell have worked the farm since 1946, a century after Malcolm's great-grandfather first built the house there. In 2004, following nine years of research, planning, and discussion, they signed a voluntary conservation agreement designed to keep the property in productive agricultural use.

"It was very different in 1946," Malcolm reflects. "Most of the nearby residences were farms then, and a good many people farmed for a living. Now there are at least twice as many houses and very few kitchen gardens even. We found this trend disturbing and didn't want to see Keewaydin Farm in the hands of a developer." The Jewells signed an agreement with Maine Farmland Trust that encourages agricultural use of the 100-acre farm and limits new construction to three lots for family members.

One of the Jewell's grandchildren, farm manager Andy Fiori, is building a home on the farm and plans to renovate the fields and plots for more intensive crop use. "I'll always be farming here," Fiori says, "one way or another. I feel lucky to be able to do this."



Four generations of the Jewell family gathered to celebrate the signing of a conservation agreement that helps ensure their farm's long tradition of agricultural use will continue.



Safeguarding Drinking Water

By preventing development in sensitive watersheds, conserved lands help protect drinking water supplies and minimize treatment costs.



RICH KNOX

MCHT

Maine's rural lands are being developed at a rate that far exceeds the national average, according to a 1997 resource inventory done by the U.S. Department of Agriculture. As development transforms Maine's countryside, it becomes harder to ensure ample supplies of clean and safe drinking water. Developed lands lose their capacity to naturally filter water and can shed soil and contaminants into nearby waters. The growing load of pollutants (especially from diffuse or "nonpoint" sources) makes water treatment difficult and more expensive. Many water utilities face continual challenges in their work to protect surface water and groundwater from contamination.

Amendments to the federal Safe Drinking Water Act, passed in 1996, highlight the need to reduce water contamination at the source rather than rely solely on water treatment. One of the best means of achieving this goal is to permanently conserve the land around water supplies. A 2002 study by the American Waterworks Association and the Trust for Public Land found that for every 10 percent increase (up to 60 percent) in forest cover surrounding water sources, water treatment and chemical costs decreased approximately 20 percent. Many communities now view land protection as the most affordable means of safeguarding their drinking water supplies.

High Water Quality at a Low Cost

Sustaining the exceptional water quality of Lake Auburn, Lewiston-Auburn's sole drinking water source since 1887, takes foresight and vigilance on the part of the Lake Auburn Watershed Protection Commission. "We work hard to enter into conservation agreements and life estates with willing landowners, and have increased our holdings to nearly 2,000 acres since 1993," says Normand Lamie, Superintendent of the Auburn Water District.

The Commission now owns 80 percent of Lake Auburn's shoreline and 20 percent of its watershed, significantly reducing the lake's susceptibility to water pollution. "We're one of just 13 water districts in Maine that have a federal waiver from filtration," Lamie explains. "Of the \$250,000 we budget annually for watershed protection, about \$150,000 goes toward land protection. That cost is miniscule compared with the alternative: constructing a water filtration plant would require a \$30 million capital investment and \$1.5 million in annual operating costs." If Lewiston-Auburn had to install filtration, Lamie adds, utility costs for consumers would likely double.

The community derives more than economic benefits from the Commission's natural lands. There are extensive jogging and bicycling trails as well as a regional environmental education center. "Our lake-front lands are free from development," Lamie says, "but that doesn't mean nothing else happens there!"



AUBURN LAND LAB

The Lake Auburn Watershed Protection Commission owns 80 percent of the lake's shoreline, helping to preserve drinking water quality and offering lands for recreation and education.

Improving Public Health



Rich Knox

Ready access to trails and natural lands encourages community members to exercise and stay fit.

More than half of Maine residents lead sedentary lives, the State Bureau of Health reports, and many of them suffer from health problems associated with lack of exercise: cardiovascular disease, obesity, high blood pressure, and some forms of cancer. People are more apt to exercise outdoors, studies by the Centers for Disease Control show, when they have access to a nearby park, preserve or recreational pathway. Ease of access can increase physical activity levels in a community by up to 25 percent. Walking, the most popular form of exercise recorded in many surveys, can improve physical health and dramatically reduce health care costs—at least 50 percent of which are linked to lifestyle choices.

Conserved properties contribute to public health in other ways as well, providing collective forms of “health insurance” that are rarely acknowledged. Natural lands buffer drinking water supplies, filter air pollution, and help to moderate climate. Even small natural areas can markedly enhance the well-being of area residents and visitors—reducing stress and depression, heightening sensory awareness, and speeding healing. “Nature is not merely ‘nice,’” writes psychologist Stephen Kaplan: “it is not just a matter of improving one’s mood, rather it is a vital ingredient in healthy human functioning.”

Creating a Healthier Community—Acre by Acre

In his role as director of Healthy Portland, an initiative of the City's Health and Human Services Department, Richard Veilleux hears from a lot of area residents about what improves their well-being. "The Eastern Promenade path, the Back Cove path, the Stroudwater River trail, and Jewell Falls are all cited frequently," Veilleux says. "These properties, part of a network of recreational trails and green space that the Portland Trails land trust has helped to create, generate levels of public use that are by all accounts extraordinary." The community's growing enthusiasm for neighborhood parks and pathways is evident in the rapid growth of the city's land trust: the number of miles in the Portland Trails network doubled from 14.1 in 1999 to 27.5 in 2003, and membership tripled. Portland has won national recognition for its parks and pathways in recent years, being named Bike Town USA by *Bicycling* magazine and cited as one of *National Geographic's* "10 Great Adventure Towns."

The city's natural lands and trails are integral to an annual spring campaign that Healthy Portland runs, encouraging residents to engage in more physical activity. Those who participate often find that the campaign transforms their lives, Veilleux says, and their positive outdoor experiences represent "a significant part of that change."

Many Portland residents routinely enjoy the natural amenities of the Eastern Promenade—on a recreational path that Portland Trails created along a railroad bed bordering Casco Bay.



Retaining Scenic Vistas and Community Appeal



MCHT

Communities that protect scenic areas often find that these natural amenities increase their desirability, helping to attract new residents, businesses and visitors.

When asked what contributes most to their quality of life, people frequently cite the natural beauty of their surroundings. Maine's predominant landscape features—water, mountains, mosaics of woods and fields, and wide-open vistas—draw seasonal visitors and inspire the loyalty of year-round residents. The sensory gifts that Maine's natural lands offer, such as sparkling waters backed by rolling hills, the echoing call of loons, and the sweet aroma of balsam fir, enhance our quality of life immeasurably.

Conserving the scenic beauty of a community improves its livability, attracting new businesses, residents and seasonal visitors. “By preserving a community's natural character and sense of place,” says Kathleen Bell, a resource economist at the University of Maine at Orono, “conservation actually becomes a stimulus for new economic growth.” According to a National Park Service survey, corporate executives ranked “quality of life for employees” as the third most important factor in locating their business. Another study, reported in the *Journal of Park and Recreation Administration*, found that small business owners ranked recreation and parks as their highest priority in choosing a new location. Local businesses in Maine strongly support nature-based recreation and tourism development strategies, including land conservation, according to recent research by the University of Maine and the Margaret Chase Smith Policy Center.

What Strikes a Chord with People

The main route into Bethel leads past a beautiful riverfront farm framed by the peaks of the Mahoosuc Mountains. When this scenic gateway property went up for sale in 1994, the Mahoosuc Land Trust (MLT) moved quickly to acquire the field (and then leased it to a farmer to maintain its productive use). “That view is the first thing people see as they enter town,” says Marcel Polak, a real estate broker and conservation consultant who directed MLT at the time. “Developing those fields would have changed fundamentally the way Bethel looks and feels.”

Conserving that landmark helped to catalyze residents’ growing commitment to sustain Bethel’s high quality of life, Polak observes. “People saw that there was a force that would protect what’s important.” Preserving its natural assets has helped Bethel draw new residents to the area, including many civic-minded retirees. “There’s no doubt,” Polak says, “that conserved land is a marketing tool for the community, and that proximity to natural lands significantly increases property value.” His realty clients routinely seek out properties near community green spaces or the White Mountain National Forest, and will pay a premium to live there. “In my opinion, those properties will hold their value well,” Polak notes, “and will have resale rates that exceed comparable lands in other settings.”

By protecting this scenic property at the gateway to Bethel, town residents helped sustain the community’s attractive character.





Measuring the Full Value of Natural Lands

BILL STULKER, JR./FOREST SOCIETY OF MAINE

Large tracts of conserved land, like this wooded terrain near the West Branch of the Penobscot River, provide invaluable habitat for diverse species.

Protected lands provide a degree of wildness that is vital to the health and well-being of countless species—including our own. Conservation helps keep human and natural communities intact, preserving habitat for all the organisms that thrive there. While all undisturbed tracts of land have some ecological value, larger parcels often contain a greater density and diversity of species. Animals with extensive ranges, like lynx and moose, depend on vast tracts and cannot survive where development fragments the landscape.

Beyond their value as wildlife habitat, conserved lands provide an array of other “ecological services” that benefit natural and human communities. Undisturbed ecosystems protect aquifers, filter pollutants, ensure crop pollination, purify air, moderate climate, feed the nutrient cycle, provide renewable resources, and help hold soils in place by controlling storm water and minimizing flooding.

The collective value of these ecological services can be seen as a form of “natural capital” that generates diverse returns—many of them not measured in the marketplace. While economists do not assign an exact dollar figure to the absolute worth of natural lands, people increasingly recognize that their full value extends well beyond market prices. Strong citizen support for the Land for Maine’s Future Program and the phenomenal growth of land conservation organizations (in Maine and throughout the nation) both signal a greater understanding of the irreplaceable values that natural lands provide.

A Critical Mosaic of Protected Lands

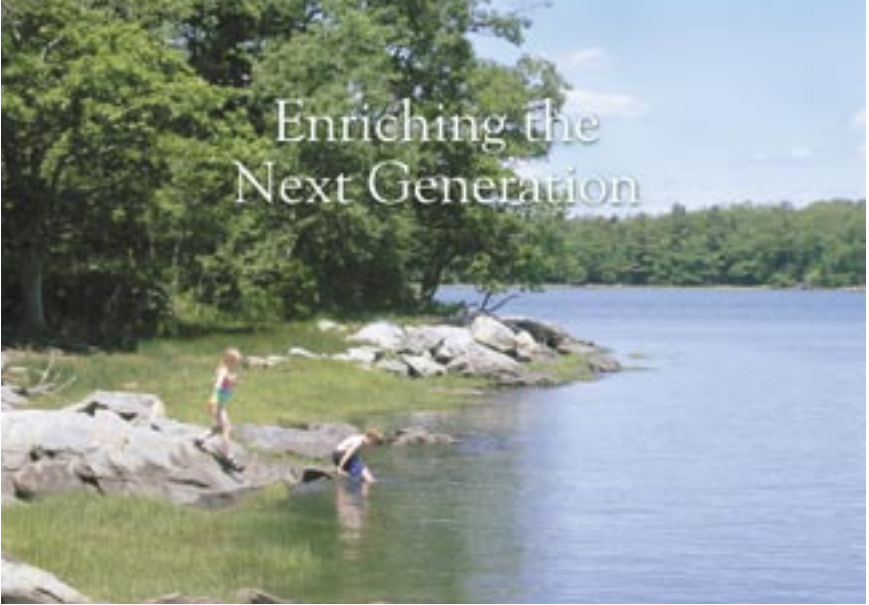
North Woods Ways, a wilderness guiding service that Garrett and Alexandra Conover have operated for 25 years, emphasizes simple, traditional gear and small group sizes. But when it comes to land protection, Garrett says, bigger is better: “Having a bigger habitat in which to operate makes bigger engagements with the landscape possible.” The collective work within Maine to protect larger tracts is creating a mosaic of woodlands, he says, that is “absolutely critical.” There’s a marked difference for humans and wildlife, he notes, between vast wild tracts and the “habitat represented by a 500-foot cosmetic fringe along a river.”

“The best thing about large-scale protection for us as a guiding service,” he says, “is that many natural areas surround waterways that are traditional travel routes.” The Conovers routinely lead canoeing and snowshoeing/tobogganing trips along the St. John River (where more than 185,000 acres has been conserved in the river’s watershed) and the West Branch of the Penobscot River (where voluntary conservation agreements and land purchases have protected 329,000 acres). “These settings are better than anything else that exists in the lower 48 in the East,” Garrett notes, “and the rarity and value of these places only increases with time.”

Conservation on a broad, landscape scale allows humans and wild animals to enjoy the benefits of undisturbed settings.



Enriching the Next Generation



RICH KNOX

Outdoor play in natural settings can enhance children's development.

A lifelong attachment to the natural world often takes root in childhood, when the power of place imprints on the young imagination. The years of middle childhood (from ages 7 to 11) appear to be a particularly important time when children are drawn outdoors to build forts, dens, and tree houses, and to craft elaborate maps of their surroundings. During these years, young people rely on ready access to neighborhood woods, fields and parks.

Outdoor experiences offer young people a broad array of benefits. After a thorough review of related literature, social ecologist Stephen R. Kellert concluded that direct contact with the natural world has a significant positive effect on children's "cognitive, affective and moral development." Opportunity for play and study in natural settings helps cultivate a lifelong appreciation of the environment and an accompanying sense of stewardship.

With landscapes becoming increasingly urbanized, there are fewer neighborhood pockets of wildness for children to experience. Conserved lands, whether community parks or land trust preserves, help ensure that children have a chance to make themselves at home in the natural world.

Getting out on the Land

Many teachers want to help children experience the natural world, but they face two major challenges to getting their students outdoors: overpacked schedules and insufficient travel funds. Recognizing these impediments, the Vinalhaven Land Trust offers local teachers use of its lands and provides funds to cover transportation and outside presenters. “Essentially, we give this as a gift to the school,” says Stevie Mesko, the Trust’s education coordinator, “providing opportunities that wouldn’t be feasible any other way.” Over the past nine years, this program has allowed island students to study nesting seabirds, sail aboard schooners, and experience first-hand the beauty and diversity of Vinalhaven’s natural lands.

Some students get out to conserved sites repeatedly in the course of a year—doing taxonomic classification, mapping and field sketching, keeping nature journals, and writing poetry. Gloria Smith, who takes her grades 3/4/5 (combined) class outdoors four times a year, says that the repeated visits have given her students “a real sense of ownership of the land. Their enthusiasm and focus in the field is amazing.” Parents often accompany the class, and Smith reports that more families are now visiting the preserves on their own. The program provides immeasurable benefits to students and, ultimately, to the community, says Mesko: “it cultivates love of the land, goodwill, and good public relations: we’re totally committed to it.”

Through repeated visits to land trust preserves, schoolchildren on Vinalhaven have gained a greater appreciation of place and understanding of natural history.





From the air we breathe and the water we drink to the soil that nourishes our food, our lives are sustained by the countless values of unspoiled natural settings. Conserved lands represent an investment in our future, providing economic returns, treasured experiences, and many other gifts that enrich our lives.

The conserved lands we enjoy today are a living testimonial to the dedication and foresight of past generations of citizens who took action to permanently protect them. To ensure that future generations inherit the natural assets we enjoy, this legacy of land protection must continue. Citizens around the state are working with local land trusts and other groups to protect the best of Maine's farms, forests, mountains and shorelines. Those engaged in land protection come from every walk of life and every region of Maine: they are volunteers and citizen advocates; town leaders and legislators; landowners who protect their own properties; and community members who come together to conserve cherished places.

To learn more about how you can get involved, contact your local land trust or the Maine Land Trust Network.

MAINE LAND TRUST NETWORK
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MAINE COAST HERITAGE TRUST

Maine Coast Heritage Trust, a statewide land conservation organization, works to conserve coastal and other lands that define Maine's distinct landscape, protect its environment, sustain its outdoor traditions and promote the well-being of its people. MCHT provides conservation advisory services free of charge to landowners, local land trusts, and state and community officials. As a membership organization, MCHT is supported by individuals committed to protecting Maine's natural beauty and resources.

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Established in 1995, MLTN strengthens the land trust community by:

- Fostering the sharing of knowledge and expertise;
- Offering training and resources; and
- Providing a forum to address issues of interest

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