

BLOOMIN' BLUES



Photo by Bruce Barnes

Western Pasque-flower, *Anemone occidentalis*

Pasque-flower is a favorite of polinators

By **BRUCE BARNES**
For The East Oregonian

Common Name: Western Pasque-flower
Scientific Name: *Anemone occidentalis*

Those plants which put on a great flower show mostly do so in the spring or summer to attract pollinators, and then afterward put their energy into producing seeds. A much smaller number of plants put on a show in the late summer or fall when pollinators are not busy with the other plants. The Western Pasque-flower is one of the very few that put on an impressive show in the spring and another in the fall. This plant is rather small when it flowers in late spring or summer, producing a single 5- to 7-lobed white or pale blue-purple flowers at the top of each stem. When in bloom, the plant is also decorated with finely cut fern-like leaves. The plant is seldom seen in bloom, since it does so right after the snow melts from around them at high elevations. About now, the plant is putting on its second show, as shown in the photo. The

seeds, which form a cluster in the center of the flower, have fully developed, and each seed has grown a long, white plume-like thread up to 2 inches long. These threads stick out in all directions and together form a spherical ball at the top of each stem. Meanwhile, the fern-like leaves have grown larger and the entire plant is quite striking, with the white spheres above the dark green leaves. The genus name *Anemone* is thought to be from the Greek anemos for wind; some people call the plant Wind-flower. *Occidentalis* means western. The origin of pasque flower is from the French Pasque Fleure for Easter Flower, which came from the Greek paskha which is related to the Hebrew pesakh for Passover. This plant has been used by northwest tribes for several medicinal purposes. Preparations from the plant have been used for stomach problems, for an external wash to treat rheumatism, and as an eye wash. **Where to find:** I've seen the plant in the Eagle Cap Wildness, in the area near the lake basin.

BRIEFLY

Rock climber dies in Oregon
OREGON CITY (AP) — A rock climber has died in Oregon after a large chunk of rock fell off the climbing face above him and crushed him, a fire district spokesman said Thursday. The climber, who has not yet been identified publicly, was found dead and dangling from his climbing ropes around

9:30 a.m. Thursday by a concerned friend who went to look for him, said Nate Hon, a spokesman for the Clackamas Fire District. The man left Wednesday evening for the climb at a park overlooking a highway in Oregon City. It's unknown when exactly the accident occurred but the climber appears to have died instantly, Hon said. The rock was about 4 feet by 4 feet by 10 feet.

COMMENTARY

The next step in sustainable design: Bringing the weather indoors

By **KEVIN NUTE**
University of Oregon

A building's primary purpose may be to keep the weather out, but most do such an effective job of this that they also inadvertently deprive us of contact with two key requirements for our well-being and effectiveness: nature and change. In the 1950s Donald Hebb's Arousal Theory established that people need a degree of changing sensory stimulation in order to remain fully attentive. And 30 years later, landmark research by health care designer Roger Ulrich showed that hospital patients in rooms with views of nature had lower stress and recovered more quickly than patients whose rooms looked at a wall. Unfortunately, many buildings — especially in cities — are not blessed with green surroundings.

I am part of a group of architects and psychologists at the University of Oregon that has been examining ways to overcome this problem using an aspect of nature available anywhere: the weather. Think of rippling sunlight reflecting from water onto the underside of a boat, or the dappled shadows from foliage swaying in a breeze. Other examples can be seen at vitalarchitecture.org. When we brought these kinds of natural movements indoors, we found that they reduced heart rates and were less distracting than similar, artificially generated movement. Early results suggest that seeing live natural movement of this kind in an indoor space may be more beneficial than viewing outdoor nature through a window, and could not only help to keep us calm but also improve our attention. These findings are consistent with the "attention restoration theory proposed by University of Michigan psychologists Rachel and Stephen Kaplan. Among other things, their work suggests that familiar natural movement patterns of this kind have the capacity to keep us alert without being distracting. **Beyond green building** Over the last two decades architects and engineers have developed approaches to building design that greatly reduce the impact of buildings on the natural environment and their human occupants. But these movements focus primarily on new buildings, which benefit only a relatively small number of people compared to the many who could be helped by making existing structures more habitable. Moreover, most people — including many of those responsible for ordering the construction and remodeling of buildings — are not aware of these advances. Many key features of green buildings, such as energy and water conservation, for example, are not immediately noticeable, and as a result, these simple but important practices are significantly underused. Several leading commentators on sustainable design, including Judith Heerwagen and the late Stephen Kellert, have suggested that in order to have any meaningful impact on the daunting environmental problems we now face, green buildings can no longer simply "do no harm." Rather,



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Dancing sunlight patterns reflected onto an interior ceiling from a wind-disturbed external water surface.

they argue that buildings need to actively demonstrate ways of living in harmony with nature. Our work suggests that bringing the movements of sunlight, wind and rain indoors could make passive energy-saving features in buildings more obvious to the people who order and occupy them, and so greatly increase their usage. **Bringing the weather indoors** Light shelves, for example, are devices that are commonly retrofitted to the windows of existing buildings to reflect daylight deeper into an interior. Former University of Oregon master's degree student Aaron Weiss and I have shown that when a shallow layer of water is added to the top of a light shelf and is disturbed by the wind, the shelf reflects moving sunlight patterns onto the ceiling inside. In controlled experiments using a windowless room, with a fan and powerful light to represent the wind and sun, we found that this kind of wind-animated light not only lowered occupants' heart rates but was also less distracting than similar, artificially generated moving patterns. Importantly, adding wind movement did not reduce the amount of light the shelves transmitted. However, it did make the shelves much more visible to people using the space. We found the same was true of a range of other key passive energy-saving techniques, including solar heating, shading and natural ventilation. Adding sun, wind or rain-generated movement did not reduce their environmental performance, and in many cases it revealed their operation to those using the building. The calming effects of natural indoor animation could be particularly helpful in stressful locations, such as hospitals and doctors' offices — especially in places where people experience the additional stress of waiting. Aquariums are often used in medical waiting rooms, for example, because they have been found to have a calming effect on patients. The stress reduction can be even greater, however, when indoor movement comes from uncontrolled nature such as the weather. But how can we invite the move-

ments of the elements indoors without undermining a building's first task — sheltering us from the weather? There are three simple ways. We can enclose weather-generated movement in glass courtyards; use sunlight to project movement from outdoors onto interior surfaces; or project it onto the outside of translucent materials, such as obscured glass. **No real substitute for live nature** There are many kinds of recorded natural phenomena available today. We can watch videos of gently rolling ocean waves, or fall asleep to the recorded sounds of falling rain. There are even sophisticated software programs that can generate these effects digitally. So why go to the trouble of redesigning buildings to bring these effects indoors? To answer this question, former University of Oregon graduate student Jeffrey Stattler and I projected a digital tree shadow onto the wall of a windowless room and tested whether there was any difference in people's responses depending on whether the electronic tree moved with live changes in the wind outside, or according to a computer program. Most people could not tell whether the tree movements were generated by the wind or by computer. But when they believed the movement was wind-generated, their assessments of its beneficial effects were significantly higher in all categories. In other words, indoor sensory change is likely to have a much greater beneficial effect on us when we think it is natural and live. So unless we are prepared to mislead people, there is no real substitute for using the real thing. According to the Environmental Protection Agency, most people in the United States now spend more than 90 percent of their lives inside buildings. Features that make us more relaxed and productive in those indoor environments, then, could have significant positive effects on a great many lives. Lighting, heating and cooling those buildings accounts for almost 40 percent of U.S. energy consumption. The same natural indoor animation effects could also help to reduce that figure by increasing public awareness of passive energy-saving in buildings. In addition to its practical benefits for people and the environment, weather-generated indoor animation also shows us that, while separating us from its extremes, buildings can also reconnect us with nature.

Unfortunately many buildings — especially in cities — are not blessed with green surroundings.

Celeb ambassadors help national parks mark 101st birthday

By **BETH J. HARPAZ**
Associated Press

How do you top a centennial? The National Park Service marks its 101st birthday Friday amid a "Parks 101" campaign enlisting celebrities as ambassadors for the park system's hidden gems. Parks 101 ambassadors have included cast members from the cable show "Queen Sugar" touring Chalmette Battlefield in Louisiana, and Olympic gymnast Dominique Dawes at the Frederick Douglass National Historic Site and other spots in Washington, D.C. Grammy-nominated singer-songwriter Keri Hilson visits the Chattahoochee River National Recreation Area in Georgia later this month. The campaign kicked off in April with Jordan Fisher, who's in the Broadway hit "Hamilton," touring Alexander Hamilton's New York City home. "Being a National Park Service ambassador is an honor," said Fisher, who's also known for TV roles in "Grease: Live," "Liv and Maddie" and "The Secret Life of the American Teenager." He raved about his visit to Hamilton Grange: "It's beautiful. You can literally walk the halls of what Alexander Hamilton built ... as a sanctuary for his family."



Ryan Halliett/National Park Foundation via AP

This June 15 photo shows gymnast and Olympic gold medalist Dominique Dawes visiting the Frederick Douglass house in Washington, D.C., as an ambassador for the National Park Service. The National Park Service is marking its 101st birthday amid a "Parks 101" campaign enlisting celebrities, actors, athletes and others to help publicize sites that get less visitation than the big parks like Yellowstone and the Grand Canyon.

Highlighting local treasures The National Park Service hosted a record 331 million recreation visits in 2016. But half of those were in just 26 of the system's superstar destinations like the Smoky Mountains, Grand Canyon, the Rocky Mountains, Yosemite and Yellowstone. This year's effort highlights

for miles. We hiked. There's tons to do. You can kayak around the island, go into coves and caves or have a diving experience." Fisher even saw whales and dolphins on the boat from Santa Barbara to the islands. **Something for everyone** Parks 101 activities and digital content will offer introductions to topics like kayaking 101, battlefields 101 and shipwrecks 101. But the campaign also seeks to show the breadth of programming offered at national parks — everything from art to yoga. Do you hate bugs and mud? That's OK, too, because another message of Parks 101 is that visiting national parks doesn't need to involve hiking, camping or road trips. In fact many of the 417 national park sites have nothing to do with the great outdoors, for example, a house dedicated to the history of America's first ladies in Canton, Ohio, and a nuclear missile site in South Dakota. And nature isn't the only way to find peace and quiet in the park system: "You can enjoy solitude walking through a historic home," said Alanna Sobel, spokeswoman for the National Park Foundation, which raises money to fund critical projects like the restoration of trails and historic structures.

Parks 101 also emphasizes how easy it is to reach many park sites. Hamilton Grange is just 20 minutes from midtown Manhattan by subway, Fisher said. The home of Thaddeus Kosciuszko, a Polish engineer who helped win the American Revolution, is walking distance from the Liberty Bell in Philadelphia. The Pullman National Monument, which tells the story of a town built for Pullman railroad car company workers, is about 15 miles from downtown Chicago. **Visitor numbers** Visitation is already trending upward at lesser-known park sites. While attendance overall in the national park system was up 7 percent in 2016 over 2015, it was up 10 percent at destinations that traditionally see fewer visitors, according to NPS spokeswoman Beth Stern. And the centennial was just one reason for last year's record visitation. Relatively good weather, low gas prices and robust international tourism helped, too. Park numbers for 2017 will likely get a bump from eclipse watchers. The centennial also spurred donations, more than doubling National Park Foundation contributions from \$73.5 million in 2015 to over \$150 million in 2016.