CONTACT: Chris Cassidy

510.559.0751

chriscassidy@berkeley.edu

Berkeley Food Institute

141 University Hall

Berkeley, CA 94720-3100

<http://food.berkeley.edu>

Berkeley Food Institute Co-Founder Wins Prestigious Award for Research on Resilient Food Systems

Professor Claire Kremen will receive the Volvo Environment Prize, including a $150,000 cash award, at a livestreamed event from Stockholm, Sweden on Nov. 12, 2020.

**For Immediate Release:** October 13, 2020

**Berkeley, Calif.:** Conservationist biologist Claire Kremen, former professor at UC Berkeley and co-founder of the Berkeley Food Institute, is being awarded one of the most prestigious prizes in the scientific world for her research on how humanity can feed itself while protecting biodiversity.

National parks and reserves have been the cornerstone of traditional nature conservation, such as the Serengeti or Kruger Park in Africa. Without these national parks, it would perhaps not be possible to see wild elephants or lions anymore. But only about 15 percent of the world's surface is protected. The lands where humans are farming, doing forestry, and ranching make up between 60 -70 percent of terrestrial Earth's surface. These lands are often managed in a way detrimental to wild plants, animals, and insects.

"With very large-scale agriculture, we are simplifying the landscapes a lot. It makes them much less hospitable for most species", says Kremen, now a professor in biodiversity, University of British Columbia, Vancouver, Canada. An expert on wild bees, much of her work has focused on insect declines.

"Insects are at the base of the food chain for many organisms. If we didn't have pollinating insects, we'd be interfering with the reproduction of about 90 percent of plant species. And, 75 percent of the crops we humans eat benefit from insect pollinators' visits. So we really need these creatures. If we don't have them, we're not going to have all the fruits and vegetables that are so important for our nutrition," says Kremen.

Reversing the trend is still possible, she says. A way to do it is by transforming the working lands to make them more diverse, by having different crops grow within the same field, planting hedgerows, and lining the fields with shrubs and trees. It would be a mixed landscape of many crops, pastures, and small areas of native vegetation and forest borders along streams.

Critics of this type of farming and the concept of agroecological landscapes say that they are much less productive, with smaller yields in a world where the human population is approaching 8 billion people.

"I would push back on that," says Claire Kremen. "Some of our agriculture is producing food at a high cost. It produces a lot of greenhouse gases or produces nutrients that end up causing dead zones in the ocean. Sometimes the soils have been mined of their fertility, and they can't be productive in the future.

"Diversified working lands, on the other hand, can be extremely productive. Farmers could promote natural pest control by harnessing the powers of nature, thus reducing the need for pesticides. We would preserve the ability to provide clean water, to store carbon in the soils, to provide habitat for biodiversity, even to provide beautiful landscapes that people enjoy."

"Professor Kremen's work on diversified farming systems and conservation has helped us to understand how the increasingly globalized food system affects biodiversity, sustainability and equity, and - most importantly - how to significantly improve this system so that we can feed ourselves while protecting biodiversity and mitigating climate change," said the jury of the Volvo Environment Prize Foundation.

“At the Berkeley Food Institute, we stand on the shoulders of giants like Claire Kremen,” said Berkeley Food Institute Executive Director Nina F. Ichikawa. “Work like hers, reconciling how we can continue feeding humanity while preserving biodiversity, is a model for interdisciplinary understanding. The Berkeley Food Institute staff, students, and affiliated faculty work every day to see Claire’s vision for healthy food systems realized, and we wish her a hearty congratulations.”

***###***

*The Berkeley Food Institute (BFI) seeks to transform food systems to expand access to healthy, affordable food and promote sustainable and equitable food production. We empower new leaders with the capacity to cultivate diverse, just, resilient, and healthy food systems. More information at* [*food.berkeley.edu*](http://food.berkeley.edu)*.*

*The Volvo Environment Prize is one of the scientific world's most respected environmental prizes. For more than 30 years, it has been awarded annually to people who have made outstanding scientific discoveries within the environment and sustainability. The award – a handmade diploma, a glass sculpture, and a cash sum of SEK 1.5 million - will be celebrated on Nov 12. with a live streaming prize ceremony and seminar. For more information about the 2020 laureate, the Volvo Environment Prize, and how to attend the online celebrations and seminar, go to* [*environment-prize.com*](http://environment-prize.com/)*.*

*Claire Kremen is Professor, President's Excellence Chair in Biodiversity at the University of British Columbia, Canada, and a former professor at UC Berkeley and co-founder of the Berkeley Food Institute. She is an ecologist and applied conservation biologist working on reconciling agricultural land use with biodiversity conservation. More information here: [ires.ubc.ca/person/claire-kremen](file:///Users/chriscassidy/Box%20Sync/BFI%20Documents/COMMUNICATIONS/Media/Press%20Releases%20%26%20Media%20Advisories/ires.ubc.ca/person/claire-kremen).*