



facebook

Sundowners stream down the Santa Ynez Mountains during the 2017 Whittier FIre.

COURTESY PHOTO



Home

Sports

Nation/World

Editorials

Opinions-Letters

Obituaries

Real Estate

Tweet

Classifieds

Special Publications

Archives

Local

Home » Local







Share Story



Down the mountains they roll

A team of UCSB researchers will look into the mountain winds that have fueled fires in the region

By SOE HAN THA, NEWS-PRESS STAFF WRITER August 17, 2019 7:39 PM

The beautiful Santa Ynez mountains that Santa Barbara County is famous for has a not so pretty side to it. The winds that stoke the fires in the region descend from the southern slopes of the mountains. These downslope winds tend to be stronger around sunset and so are known as "sundowners."

Sundowners are a bit mysterious, but a team of UCSB researchers are setting out to study them.

"It's the most important fire-weather regime we have in coastal Santa Barbara," said professor Leila Carvalho, a UCSB meteorologist. "All the major wildfires that have affected Santa Barbara have been influenced by sundowners."

Not too much research has been done on sundowners, despite their role in stirring up the Sherpa Fire, the Whittier Fire, the Thomas Fire and others throughout Santa

Barbara County history. Dr. Carvalho hopes to change that.

She and her UCSB colleague Charles Jones will lead a project to learn more about the windss. This project, the Sundowner Winds Experiment. will take place from April 1 to May 15 2020.

The pair's research will give people another wind to think about other than the Santa Anas, which reach from Ventura to Baja California. For its geographical span and effect, the Santa Anas have been the topic of much research.

"Santa Ana winds have been studied since the 1950s and '60s," said Dr. Jones. In contrast, the first peer-reviewed paper on sundowners came out around 2000.

Luckily, the researchers are armed with some facts going into this project. They've noted the effects that the coast has on these winds.

"We believe that warming in the valley and the presence of the marine layer on the coast are important to explain why sundowners typically intensify after sunset and weaken near sunrise," said Dr. Carvalho.

The research project will collect field data to analyze sundowners. The project will be funded by the National Science Foundation, which is putting in a multimillion dollar grant. The money will fund 15 temporary instruments - weather towers, wind profilers and ceilometers - which will be operated by the team.

Translate Website Select Language Powered by Google Translate

Related Stories

- Sundowner wind advisory this evening ARCHIVE Jun 5, 2014
- Warm, dry conditions heighten fire danger **ARCHIVE** Oct 17, 2018
- OUR TOWN: Professor to discuss sundowner

ARCHIVE Jan 9, 2019

- AccuWeather: expect gusts out of the north up to 45 mph Thursday Dec 13, 2017
- Don't blow it when talking winds **ARCHIVE** Dec 31, 2017
- Letters: A thank you to the wildland firefighters **ARCHIVE** Aug 16, 2007
- Sundowner winds and Santa Anas; both dangerous, but a breed apart
- ARCHIVE May 24, 2009 • Thomas Fire consumes over 237,000 acres, 25 percent contained
- **CHIVE** Dec 13, 2017 • Sundowners sometimes confused with Santa Ana winds

ARCHIVE Jun 26, 2016

Fire weather watch issued as Sundowners return ARCHIVE Aug 29, 2016

The team includes members from other universities as well. University of Wyoming scientists, for example, will bring their research plane, the King Air, over to the county for the project. This plane has a capacity of more than 1,500 pounds, ensuring the scientists with a mid-air research lab.

Not just university staff will be on board. The researchers are collaborating with the Santa Barbara County Fire Department and the National Weather Service in Oxnard.

The goal of the multimillion dollar project is simple and powerful: to be better able to forecast sundowners and their effects. A better understanding of these winds and the ability to predict them will boost our chances against wildfires.

email: stha@newspress.com

Home Local News Business Celebrations Columnists Life Sports Scene

Editorials Opinions & Letters Obituaries Travel

Special Publications Parade Magazine

Classifieds Place your Ad Real Estate Rentals Employment Announcements Merchandise Garage Sales

Real Estate Finance House & Home Open Home Directory Commercial Properties RSS Feeds Rentals

Site Index

Arrest Logs

Gas Prices

Weather

Traffic

Archives Events Calendar **Contact Us** Contact News Pay Your Bill Advertising Information

Elected Representatives TV Listings FAQ Front Page **Virtual Edition**

Follow us on:

More



All Content Copyright@ 2019 Santa Barbara News-Press / Ampersand Publishing, LLC unless otherwise specified. Legal | About Us