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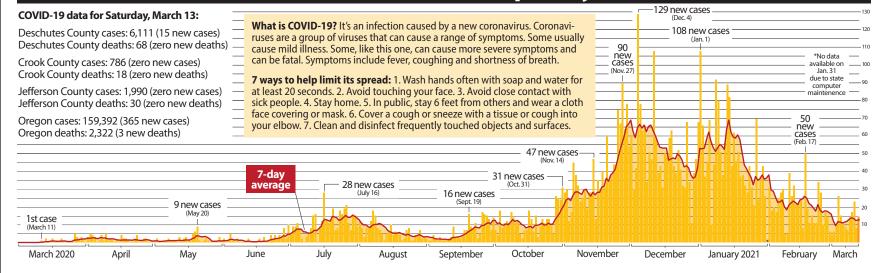
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# LOCAL, STATE & REGION

### New COVID-19 cases per day ESCHUTES COUNTY



# Is there an afterlife?

### A strange soul-weighing experiment in Oregon 20 years ago produced an unusual result

### **BY DOUGLAS PERRY** The Oregonian

Humans are endlessly fascinated by death. Everyone wants to know what, if anything, awaits on the other side.

The latest probing of this subject comes from psychiatrist Bruce Greyson, whose just-published book is called, simply, "After."

The volume's arrival is as good a reason as any to look back at one of the more unusual experiments ever conducted in Oregon. Here's the study's abstract in its entirety:

"Twelve animals (one ram, seven ewes, three lambs and one goat) were studied. At the moment of death an unexplained weight gain transient of 18 to 780 grams for 1 to 6 seconds was observed with seven adult sheep but not with the lambs or goat. The transients occurred in a quiet time at the moment of death when all breathing and movement had ceased. These transient gains are anomalous in that there is no compensating weight loss as required by Newton's Third Law. There was no permanent weight change at death. Dynamic weight measurements may present a fruitful area of investigation."

The 2001 study, by Lewis E. Hollander, Jr., is titled "Unexplained Weight Gain Tran sients at the Moment of Death." It attempted to build upon the work of the late Massachusetts physician Duncan Macdougall. The goal of Macdougall's original work 100 years earlier: to prove that the soul existed. Macdougall's ambitious objective turned on the commonplace belief that there is a soul and that it leaves the body at the time of death. He figured that, while the soul surely is a will-o'-the-wisp, in the modern

Northwest wildlife

agencies warn of

Associated Press

inside them.

PORTLAND — Wildlife

ton and Idaho are urging pet

ering invasive zebra mussels

ural waterways. Unexpected

sightings in Northwest pet

stores have wildlife officials

"It would be devastating to

our environment if these ever

got established in Oregon or

the Pacific Northwest," said

Rick Boatner, the invasive spe-

cies wildlife integrity supervi-

sor at the Oregon Department

found zebra mussels in "Betta

Buddy Marimo Ball" moss ball

"I work in the aquatics de-

partment, and almost every

shipment of these moss balls

that I have unpacked for the

A PetCo employee in Seattle

sounding the alarm.

of Fish and Wildlife.

products in February.

The mollusks breed quickly and can wreak havoc on nat-



That is, he decided to weigh it.

The doctor, working at the beginning of the 20th century, put a dying tuberculosis patient on a commercial scale and closely monitored the man's last breaths, figuring a sudden loss of weight at the moment of death would be the result of the soul lifting into the ether.

Macdougall's "Patient 1," resting on an E. & T. Fairbanks scale, reached his end in April 1901. When the man died, sure enough, the scale reportedly quivered, dropping threefourths of an ounce.

"Which is, yes, twenty-one

math," The New York Times wrote when the Sean Penn movie was released in 2003.)

Hollywood's decades-later reinterpretation notwithstanding, Macdougall deemed the experiment a success. He'd documented the soul leaving the body.

Not surprisingly, the physician received copious criticism of his experiment, but he held firm, beating back arguments that the 21 grams surely were the result of what's called insensible fluid loss. He went on to redo the experiment on a handful of other humans, and later on dogs.

Macdougall's dubious work captured the imagination of various scientists and wannabe scientists over the years. A few of them took up his soul-weighing experiment, using ever more sophisticated equipment. One of them, in 2000, was Lewis Hollander. a retired physicist living in Southern Oregon.

Back to Roach:

"(Hollander) rigged a seven-by-three-foot platform to a Toledo model 8132 electronic digital indicator, a quartet of load cells and a computer. His subjects were eight sheep, three lambs and a goat, all of which were sedated and then euthanized, and all of which, he assures us, were headed in that direction anyway. The animals were wrapped in plastic to, as he put it, contain any voiding. This was important because (a) voided material might drip off the weighing surface, creating a spurious weight loss, and (b) you try getting sheep urine out of your load cells."

But the result of this experiment proved truly unexpected.

The sheep — though not the lambs or the goat — gained weight at death for a few seconds. One gained as much as 780 grams. Hollander called this baffling gain an "anomalous transient."

He published his results in 2001 in the Journal of Scientific Exploration, a journal that focuses on work that is "ignored or studied inadequately within

mainstream science."

SOURCES: OREGON HEALTH AUTHORITY DESCHUTES COUNTY HEALTH SERVICES

BULLETIN GRAPHIC

Hollander's experiment sounds about as fringe as fringe science gets, but Japanese engineering professor Masayoshi Ishida took the research seriously enough to test it via computer model and then produce his own study, "A New Experimental Approach to Weight Change Experiments at the Moment of Death with a Review of Lewis E. Hollander's Experiments on Sheep."

It was published, also in the Journal of Scientific Exploration, in 2009.

Ishida wrote that the "transient gain of weight" for one or more of the sheep was likely a glitch of some sort. "It is doubtful whether the weighing system (primarily the four load cells) functioned normally," he wrote.

He added that the study's overall result, however, "remains to be explained."

What did Hollander himself think of his experiment? When asked about the sheep's weight gain at death, he said:

"I haven't the faintest idea." But he does believe it has something to do with the great bevond.

"I think that at the moment of death that little window opens up," he said. "I think that maybe we're all connected to

# Sheep graze in Oregon. age it must be detectable.

Courtesy of Serkan Ates/Oregon State University

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Lottery results can now be found on the second page of Sports.

grams," wrote Mary Roach in her 2005 bestseller "Spook: Science Tackles the Afterlife." "Hollywood metricized their reference to the event for the simple reason that '21 Grams' sounds better. Who's going to go see a movie called <sup>7</sup>Point Seven Five Ounces'?"

("21 Grams' is a ruminative, stunned look at life after death - that is, the existence of the living after they have been devastated by loss; it's the after-

something bigger than we are."





"Creativity comes from a conflict of ideas." - Donatella Versace

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Bend, Oregon



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Invasive zebra mussels can clog water intake and delivery pipes, dam intake gates and pipes, and adhere to boats and other surfaces.

past two months has had mussels nestled in the moss balls," reads a specimen filing with the U.S. Geological Survey.

Zebra mussels are small but destructive. They eat algae that native species need to survive. The USGS says they can also incapacitate native mussels. They clog storm drains, drinking water systems, irrigation and dams. Zebra and quagga mussel infestations in the Great Lakes region have cost hundreds of millions of dollars annually.

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