

OREGON'S TWO NEW METEORITES: MORROW COUNTY AND FITZWATER PASS. Richard N. Pugh¹, Melinda Hutson¹, Alex Ruzicka¹, ¹Cascadia Meteorite Laboratory, Portland State University, Department of Geology, Cramer Hall 17, 1721 SW Broadway, Portland OR 97201.

The Cascadia Meteorite Laboratory has a grant-funded outreach program entitled "Meteorites on the Road", which brings public lectures and meteorite samples to libraries, schools, community centers, and grange halls throughout Oregon, with an emphasis on bringing science to rural communities. As a result of this program, two new meteorites from Oregon have been discovered and classified during the previous year. Prior to 2010, there were four known meteorites from Oregon, all from the western part of the state. The two new meteorites are the first recovered from east of the Cascades. Both meteorites had been picked up by their finders decades ago. One was stored in a coffee can; the other in a flower bed. Both were identified as meteorites as a result of our outreach program. Morrow County is a large (~40 lb) stone, which is classified as an L6 chondrite—the most common type of meteorite observed to fall. However, Morrow County is an oriented (cone-shaped) stone, indicating that it did not tumble as it came through the Earth's atmosphere. Additionally, it has a distinctively colored fusion crust, an odd pattern of weathering (silicate staining with very little metal oxidation), and complex shock melt veins. Fitzwater Pass (65 grams) is classified as an IIIIF iron, one of the rarest of the iron meteorite classes—this is only the ninth IIIIF iron to be identified. "Meteorites on the Road" was funded by NASA grant NNG06GE17G and LEO (Libraries of Eastern Oregon). Classification work was funded by public donations.