

Welcome to Hail Alley



Tips from the Posse

By Mark Rackay

I was standing at my position in left field, one hot summer day. Our team was playing for a division championship, with the winner moving up and the loser going home. Thunderstorms were very close, but nobody seemed to pay any attention, with all players deeply into the game.

All at once, the dark sky opened up with a torrent of hail. I didn't think anything, including the lightning, could stop or delay this game, but the hail was destined to prove me wrong. It was several minutes of us players getting pelted by marble sized hail before some genius umpire decided to let us come in off the field. While most of us on the field had bruises and welts, no serious injuries were sustained.

When I think of all the ways the outdoors can do a person in, seems hail is never mentioned, but rest assured, it is a force to be reckoned with. Anytime you see one of those anvil shaped thunderstorm clouds, there is the possibility of hail.

I know most of you have heard of tornado alley, the area in the Midwest that is prone to tornadoes. There is hurricane alley, which I am convinced cuts across South Florida. I lived there for several decades and



The hail that chased us off the baseball field wasn't anywhere near this size. (Photo/National Weather Service Wichita, Kansas)

can't remember all the storms we dealt with.

Before you breathe a sigh of relief about living in Colorado, know that you are in hail alley. The folks at the NOAA National Severe Storm Laboratory, state Hail Alley is located where Nebraska, Colorado, and Wyoming meet. That area averages 7 to 9 hail days annually. The area actually spreads south to Texas. While Florida has the most thunderstorms, Colorado, Wyoming, and New Mexico have the most hail.

Thunderstorm clouds breathe in warm air, called updrafts, and exhale cool air, called downdrafts. Water droplets inside the cloud are carried up by the updraft, until it reaches an atmospheric layer with freezing temperatures, turning the droplet to ice.

The fall back into a warmer layer, melting the surface of the frozen drop-

let, and gain more water as it falls down, only to be carried up again, freeze, and increase in size. This will go on, all the while the diameter of the hail will grow in size and create a hail stone. Eventually the hail stone will grow too heavy to be carried back up with the updraft and fall to the ground. A strong updraft occurs in a severe storm, and the stronger the updraft, the larger the hail. Anything larger than a quarter can damage a car.

Smaller hailstones can make landfall at 24 miles per hour. The large stones, say 4 inches across, can impact the ground at 100 miles per hour. Catching a hailstone that size on the noggin can send to paradise a bit ahead of schedule.

Summer in the mountains often produces what we affectionately call popcorn snow. This type of precipitation, called graupel,

forms when supercooled water droplets freeze onto falling snowflakes, creating soft, opaque little balls of snow that can be 5mm in size. Graupel reminds me of the very fine styrofoam balls used in packaging, that get everywhere and on everyone, when you open the package. Graupel is often mistaken for hail. Large graupel won't kill you, but large hail can.

Hailstorms inflict costly damage to property and crops every year in the U.S. I have a friend who works in a body shop in Kansas pulling hail dents from cars. He is busy the year round with heavily damaged cars beat up by hail. Records estimate the United States experiences between \$8 and \$15 billion dollars of damage annually. In many regions, hail is the primary cause of roof damage.

The hailstorm that was the costliest was probably

in Sydney, Australia on April 14, 1999. That storm caused \$4.29 billion in damage when 3 1/2-inch hail fell for nearly an hour. Denver had a storm in 2017 that caused \$2.2 billion in damage when hail the size of baseballs damaged vehicles, homes, and commercial buildings.

Hail injures many people in the U.S every year, often times severely, but deaths are rare. Since 1942, there have 8 deaths by hail recorded in the U.S., but in other parts of the world, more people have been killed.

In 1936, a hailstorm killed more than 200 people in China, and 92 people were killed by a storm in Bangladesh in 1986 by hail weighing over 2 pounds. A storm in India, back in 1888, produced hail the size of "goose eggs and oranges" killing 246 people.

A total of 12 people died when a severe thunderstorm produced flash flooding in Cheyenne, Wyoming, on August 1, 1985. Hail drifts up to 8 feet deep were reported, burying vehicles. A storm in 1959 dropped hail on Seldon, Kansas. By the time the storm moved out, 18 inches of hail had buried the town.

The largest recognized hailstone in the U.S. fell near Vivian, South Dakota on July 23, 2010. It measured 8.0 inches in diameter and 18.5 inches in circumference, tipping the scales at 1.9375 pounds. Unofficial records claim an 8-inch diameter stone fell in Gay Hill, Texas, back in 1892.

Hail can be a menace to outdoor folks. The only guys who didn't have a headache at our baseball game were the 2 players wearing a batting helmet, one in the batter's box, and the other on-deck. I'm not saying we should pack a hard hat with us when we go hiking, but I would keep an eye on the sky. When that dark anvil cloud approaches, head for the dugout.

Mark Rackay is a columnist for the Montrose Daily Press, Delta County Independent, and several other newspapers, as well as a feature writer for The Nautical Mile, and other saltwater fishing magazines. He is an avid hunter and world class saltwater angler, who travels around the world in search of adventure and serves as a Director and Public Information Officer for the Montrose County Sheriff's Posse. Personal email is elkhunter77@icloud.com. For information about the Posse call 970-765-7033 (leave a message) or email info@mcspi.org

LAND

FROM PAGE B1

we saw when Sen. Lee tried to sell off America's public lands. It's about recognizing that the threat is not gone and it's coming from a lot of different directions right now," said Aaron Weiss with the Center for Western Priorities, which is organizing the road show.

The land sale may return but the more immediate threat is a decline in staffing and funding for public lands that could limit public access and agency work to protect ecosystems.

Conservation groups are bracing for the Trump administration's plan to reduce the size of national monuments. President Donald Trump in his first term reduced

the size of the 1.35 million-acre Bears Ears and 1.89 million-acre Grand Staircase-Escalante national monuments. A May Justice Department opinion supports a president's ability to use the Antiquities Act to reduce or even remove national monuments created by previous administrations. Since the Antiquities Act became law in 1906, 18 presidents have used it to create 168 national monuments.

The Trump administration's latest budget plan redirects \$387 million from the Land and Water Conservation Fund, which Trump permanently funded at \$900 million a year as part of his Great American Outdoors Act in 2020. The shuffling of the royalty

See LAND page B5



Colorado U.S. Sen. John Hickenlooper speaks during an Outside Summit session titled "Common Ground: Shaping Public Lands Policy in a Divided Government" Friday, May 30, 2025 in the Denver Public Library. (Alyte Katilius, Special to The Colorado Sun)



SUMMER CLEARANCE SALE

Save on Summer apparel from Marmot, Kuhl and Outdoor Research

10 SOUTH SELIG AVE
MONTROSE, COLORADO 81401
970-249-4226