



El Cabrón: The Spring Wind of the Southwest

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Abstract

People all over the world have assigned evocative names to winds that give character to their landscapes and offer insight into their responses to Nature. Yet the Southwest's fierce and dusty spring wind is unnamed. We examine the causes, effects, history, and cultural significance of this wind as a defining geographic trait. After exploring the names and meanings of wind in Native American, Hispanic, and Anglo cultures, we found no commonly used descriptor for the Southwest's legendary spring wind. We offer the name "*El Cabrón*," then provide context for this seemingly crude choice as a humorous, cross-cultural, and psychologically useful adaptation to the challenges faced by diverse residents of the Southwest.

Keywords: Names of winds, cultural adaptation, Southwest's spring wind, *El Cabrón*

1. Names for Winds

The Southwest's fierce and dusty spring wind has no name. For all its power and influence, despite its myriad roles in our cultures, ecosystems, landform processes, agriculture, and daily lives, we have yet to assign an endearing or damning name to the intense, sometimes violent wind that sweeps across the Southwest as winter ends.

This is very strange in a region so blessed with inventive, cross-cultural toponymy - the naming of places. One example suggests this richness. A high, basalt-capped mesa south of San Ildefonso Pueblo is called *Tsahveeyo* by the tribe, after an evil giant who ate children and was slain for his crimes by Twin War Gods (Pearce, 1965). The Spanish settlers took note and called the landform *gigantes* ("giants"). Still later, Anglos called the place Black Mesa; a name which captures the look of the feature, but masks its social context and moral meaning.

Assigning no nickname to the Southwest's spring wind is like having no name for the sky, a mountain range, or a willful child. Across the world, strong seasonal winds have been honored and cursed by assigning a title that conveys grudging esteem, attachment to place, and deep regret (Stewart and Weiland, 2008). Cultures do this because wind is one of the most elemental and powerful natural forces we experience. Winds are much more than meteorology; they are characters in the socio-environmental dramas of our lives. Technology may shield us from heat and cold, but wind remains an inescapable messenger of our frailty and need for humility about the natural world. Winds – strong seasonal tempestuous winds – alter our daily routines, cause shifts in behavior, drive ecological cycles, cause car wrecks, empower geomorphological processes, cycle nutrients, erode soils, pollinate crops, bring allergies and illness, fray our nerves, and deposit a fine layer of meaning on our cultural landscapes. In the Southwest, part of

how we mark our calendars is based on the arrival of spring gales. Yet, we have not yet faced the wind and named it.

Southern California has the Santa Ana; hot, bone-dry easterlies that chase wildfires across the chaparral to the sea. They are sometimes called “Devil winds” or “Devil’s breath” because of the hellish misery they bring. Technically, Santa Anas are katabatic winds, from the Greek; “to flow downhill,” in this case from the Great Basin and Mojave deserts east of Los Angeles. Despite occurring in the fall and winter, these winds are warm or even hot, heated adiabatically by compression. Beyond fire damage, raging tempers, rising crime rates, and outbreaks of “Valley Fever,” Santa Anas perform positive roles in plant succession and cause cold water to upwell along the Pacific Coast, lifting vital nutrients into marine ecosystems. The Santa Ana (or Santana) was named in the 19th century and given a link to popular culture by music artists including the legendary Chicano band Santana, the Beach Boys, Randy Newman, and Steely Dan – “Here come those Santa Ana winds again.” These blasts are so woven into life in Southern California life that novelist Joan Didion (1990) featured them in *Slouching Towards Bethlehem*: “The violence and unpredictability of the Santa Ana affect the entire quality of life in Los Angeles, accentuate its impermanence, its unreliability. The wind shows us how close to the edge we are.” Raymond Chandler (1946) went a few steps further in *Red Wind*: “There was a desert wind blowing that night. It was one of those hot dry Santa Anas that come down through the mountain passes and curl your hair and make your nerves jump and your skin itch. On nights like that every booze party ends in a fight. Meek little wives feel the edge of the carving knife and study their husband’s necks. Anything can happen.” Winds can be dynamic metaphors for the character of a place.

Euros was the name for the east (European) wind to the ancient Greeks, along with Boreas the north wind, Notus the south wind, and Zephyrus the west wind. Aeolus from which we derive the geographic term for sand dune processes, eolian, is the motherland of storms in Greek mythology. The Mediterranean region has the Mistral; a cold northerly wind that slams across France during winter and spring (Watson, 1985; RMS, 2014). When strong high and low pressure centers converge over northern Europe, a current of cold air is drawn from high latitudes or the Alps and races across Provence (Szarka, 2007). The name comes from the Catalan language – *mestral* – meaning “masterly” – the one in charge. The Mistral

brings buffeting wind for days at a time, but also blesses Provence and adjoining regions with unusually sunny climates compared to Paris and Lyon. The wind clears the air of dust and pollution and dries the land, giving rise to another name, *mange-fange* (“mud-eater.”). Across Mediterranean coastal regions, this wind is said to encourage good health and great crops. Oak trees lean from the force of the Mistral and hedgerows are planted along property lines to provide shelter. Traditional Provençal *santons* (carved figures) are often shepherds holding their hats in the powerful Mistral.

Dunes of the Sahara Desert are shifted by powerful, hot, southerly winds called the *Sirocco*. In other parts of North Africa, the Mediterranean, and the Middle East these scorching summer winds go by other names: *Khamsin* (Egypt), *Ghibli* (Libya), *Haboob* (Sinai), *Harmattan* (West Africa), *Nashi* (Iran), *Sharan* (Arabia), and *Sharki* (UAE), *Xiokk* (Malta), and *Leveche* (Spain) (Bagnold, 2005; RMS, 2014). By whatever alias, these desiccating winds are generated when a hot, dry, tropical air mass is drawn northward by low-pressure systems moving eastward across the Mediterranean Sea. Near-hurricane force winds entrain sand and dust, obscure the sun, and cause widespread health problems. Biometeorologists, researching the effects of weather on humans and other organisms, know that certain winds are linked to health effects, both good and bad (Fletcher, 1988; San-Gil *et al.*, 1991; Markham and Markham, 2005; Yackerson *et al.*, 2011; Yackerson *et al.*, 2012; Sharafi *et al.*, 2013). In Europe, the *Föhn* winds, derived from the Greek word for “fire,” are famous for detrimental physical and psychological conditions ranging from bronchitis to paranoia. These ill winds have also been associated with increased car accidents, disorderly crowd behavior, and increased domestic violence. Desert winds in particular, such as the Israeli *Sharav* (“heat of the land”) can have adverse impacts on mood, respiratory systems, migraines, blood pressure, arthritis, worker absenteeism, and increase cardiac disease, heart attacks, and suicides (Yackerson *et al.*, 2011; Yackerson *et al.*, 2012).

The cooling southeast winds of the South African coast are referred to as the “Cape Doctor” or simply “The Doctor” (Bowditch, 1995). There is the “Freemantle Doctor,” a cooling sea breeze of Western Australia, and the “Southerly Buster,” a wind that refreshes residents of Sydney. These vernacular names imply healing relief from stifling temperatures; the classic effect of summer sea breezes. As the land heats, air rises, low surface pressure is created, and cool wind is drawn in from across the ocean. People

all over the world crowd beaches during summer months in hopes of a visit from one “doctor” or another. Vacations are planned around this seasonal medicine (Watson, 1985).

Every winter, residents of Montana and Alberta await a rapidly-warming wind they call the “Chinook.” Cold air builds up west of the Continental Divide and pours east over the Rocky Mountains into the Great Plains (Fletcher, 1988). As the air sinks, it warms adiabatically from the basic physics of Boyle’s Law. The most astonishing temperature change every recorded in North America took place at Great Falls, Montana on January 11th, 1980 (Wright, 1998, 28). A Chinook wind arrived and in seven minutes, the temperature went from -32F to 15F. At Havre, Montana, an increase of 43 degrees F in fifteen minutes was recorded. An 80 degree F rise was once measured in four hours at Kipp, Montana where three feet of snow quickly turned to lakes. In 1962, at Pincher Creek, Alberta the temperature rose from -2F to 72F in one hour. It’s no wonder, that “Chinook” means “snow-eater” in certain Native American languages. Montana artist Charlie Russell immortalized this wind in his 1903 painting: *Waiting for a Chinook*. A starving steer – ribs showing, head downturned fatalistically – stands in a frozen white landscape, surrounded by hungry wolves. The canvas asks a question: “Will the wind come in time?” In the Southwest we are more likely to ask: “Will the wind stay away?”

2. The Southwest’s Spring Wind

A sneeze, a facial sandblasting, a truck blown off the road, a brown haze obscuring the mountains, an obscenity-riddled rant. These are some of the signs of the spring wind in the Southwest, a region drawn with many different boundaries but one linked by this incessant seasonal force. March typically signals the wind’s arrival, setting this month apart from the rest of the year. Bright blue-sky mornings are replaced by afternoons smudged by brown clouds of dust and sand. Southeast Arizona, New Mexico, West Texas, and Northern Chihuahua are particularly infamous for this “extra season.” Spring can begin in absolute beauty, a blessing compared to the still-raging northern winter snowstorms, but our patience and mettle are quickly tested. Dusty wind sometimes gusts to 80 kilometers per hour (50 mph) or more; plans get changed, people hunker down, the house shutters and shakes. You find yourself hiding indoors, reading a good book as you would on a rainy day. Some take to their beds in depression and loathing. Others hack and wheeze.

How can we mark this primal presence? We typically comprehend its shape, scale, and force when plagued by dust devils and dust storms. We curse at spring gales but welcome breezes that bring blessed relief from summer heat. We are ambivalent about the wind. It brings us distress and pleasure, anguish and pride. Without it our legendary sunsets would be dulled. It spins windmills raising precious water for thirsty livestock. The wind is our inheritance – a great brown but environmentally green hope that can be harnessed for clean energy. According to the National Renewable Energy Laboratory (NREL), west Texas leads the U.S. in wind generated electricity with 10,377 Megawatts (MW) of installed capacity (NREL, 2013). New Mexico has only 778 MW of capacity despite the potential for generating more than 60 times that. Arizona, while suffering through dust storms has much lower potential than either of these states. The Great Plains tend to be windy year round and the region has the highest wind power potential in the country. But when the spring wind grows too feral, even turbines must be locked down. Between 1932 and 2005, there were over one thousand notable dust storms in southern New Mexico and west Texas alone (Novlan *et al.*, 2012). The average has been fifteen major events per year – nearly all during the spring season. These dust storms typically reduce visibility to 10 kilometers (6.2 miles) or less, for 2 hours or more. Most of these events occur during March, April, and May when there is a 42 percent chance of wind and dust on any particular day (Novlan *et al.*, 2012). Of course, in the Chihuahua Desert, dry soils and sparse vegetation make even moderate winds particularly effective at creating dusty conditions.

But why is the spring wind so powerful in the Southwest? A primary cause is eastward traveling cold fronts moving into our area from California and the Pacific (Sheppard *et al.*, 2002). These windy fronts happen most frequently in the late-winter and spring seasons. They are created by bends in the jet stream that are followed by strong high altitude winds that take a looping turn southward (Novlan *et al.*, 2012). This is particularly true when the center of the counterclockwise wind spiral is centered over northern New Mexico, near Albuquerque. The accompanying low air pressure, sometimes called an “Albuquerque low,” sucks in air from Mexico. As the pressure gradient steepens (seen as more tightly packed isolines in Figure 1) and the Coriolis Effect from Earth’s spin is added, the air veers toward the right as it’s pulled toward the low pressure center. This causes strong gusty winds to race from the southwest or west across the desert entraining massive amounts of dust.

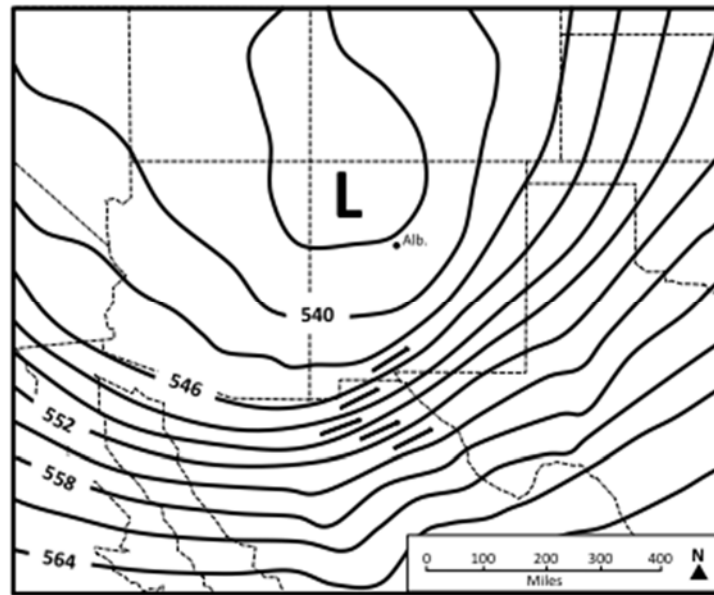


Figure 1. Typical 500 hPa geopotential height (gpm/10) anomaly showing steepening pressure gradient and resulting SW winds around an “Albuquerque Low” pressure center.

Thermodynamic processes also worsen dusty conditions. With little spring cloud cover in the Southwest, the sun quickly heats air near the ground surface. As heating intensifies throughout the day, warmed air convects upward, rising like a hot air balloon. These parcels of air can soar to heights of 2,200 to 3,200 meters (7,000 to 10,000 feet) and collide with stronger high altitude winds, creating even stronger flows. Topography can further amplify this force. Mountain passes and canyons increase wind speeds as air funnels through them. This is particularly important downwind of mountain ranges, where wind speeds can increase by fifty percent (Novlan *et al.*, 2012). A typical National Weather Service synopsis of these weather systems reads like this:

NATIONAL WEATHER SERVICE
EL PASO TX/SANTA TERESA NM
355 AM MST FRI MAR 7 2014.
SYNOPSIS... AN UPPER LEVEL
DISTURBANCE WITH A COLD
FRONT WILL CAUSE WINDY
CONDITIONS TODAY... WINDS
WILL PUSH WARM DRY AIR INTO
NEW MEXICO/WEST TEXAS
WITH TEMPERATURES ABOVE
NORMAL THIS AFTERNOON.
MIXING HEIGHTS WILL ALSO
RISE TO NEAR 600 MB THIS
AFTERNOON ALLOWING

STRONGER WINDS ALOFT TO
GUST TO THE SURFACE. THUS
EXPECT WINDY CONDITIONS
THIS AFTERNOON.

The El Paso National Weather Service Forecast Office, which covers all of southern New Mexico and west Texas, issues a variety of notices based on wind speed (Novlan *et al.*, 2012). A “Wind Advisory” is issued for sustained winds of 40 to 63 kilometers per hour (25 to 39 mph), or gusts to 92 kilometers per hour (57 mph). “High Wind Watches” occur when wind speeds pose a hazard or threaten lives, such as winds of 64 kilometers per hour or greater (40 mph), or gusts stronger than 93 kilometers per hour (58 mph). A “High Wind Warning” is released when these strong winds and gusts are expected to last for two hours or more. A “Blowing Dust or Sand Advisory” warns of conditions where dust reduces visibility to 1.6 kilometers or less (1 mile or less). “Dust Storm Warnings” are given when you can see less than a quarter mile and mountain ranges seem to vanish.

The Southwest has been recognized as the dustiest region in North America (Prospero *et al.*, 2002, Novlan *et al.*, 2012). The spring wind is a noisy, epic force in the landscape. Yet, we have remained silent about what to call it.

3. Choosing a Name

We face a dilemma. The Southwest is multi-cultural to a degree and in a configuration unseen in the rest of the country. The region is a robustly tri-cultural region of Native Americans, Hispanics, and Anglos (Meinig, 1971; Lavender, 1980; Horgan, 1984; deBuys, 1985; Nostrand, 1992). Finding a unifying name for the spring wind is a daunting task.

Native American populations are large in New Mexico (10% of state total, 200,000), Arizona (6% of state total, 350,000), with smaller numbers in West Texas. Native American names for wind are diverse, yet each conveys a deep knowledge of seasons, values, land, medicine, and life.

There are twenty-one Pueblo nations in New Mexico and Arizona. Elsie Clews Parsons' two volume compendia *Pueblo Indian Religion* (1939) analyzed the traditional cultural practices of these diverse peoples related to ceremonies, spirits, cosmic notion of emergence, calendars, crop planting, and healing. In conventional Pueblo life, wind is linked to moral meaning and compass directions, playing a significant role in many tribal cosmologies. Zia mothers sometimes place a small bit of charcoal in the mouth of their baby to prevent cold north winds from making the child sick. In Taos Pueblo, Wind Old Woman brings rheumatism and a powerful wind named Refuse Man is said to carry smallpox and other epidemics, but at Zuni wind can be called on to blow disease away. At Jemez, stepping into a whirlwind is said to cause a miscarriage. On the Hopi mesas, sandstorms are conceived of as an angry old woman, except in times of war, when this spirit stings the eyes and bewilders the mind of enemies (Parsons, 1939, 178). At Laguna Pueblo, if a dusty windstorm arrives instead of rain during certain ceremonies, a dancer might be suspected of violating the rule against sexual intimacy prior to the ritual. At Acoma, Zuni and other pueblos, strong winds are said to be sent by witches to do harm. Zuni and Hopi cultures are particularly concerned with wind, evidenced by a pantheon of spirits including Winds of the Directions and Wind Woman. Whirlwind is the name of a bedeviling spirit in many pueblos and "Wind prayer feathers" are commonly worn in numerous ceremonies (Silko, 1986). Making the wind sacred, profane, and nuanced is not an unexpected adaptation of people who live out in the vast openness of the buffeted Southwest.

In Diné (Navajo) culture, a complex cosmology of wind exists that inter-relates with the more widely-known Four Sacred Mountains that frame Dinétah – the

Navajo world where a state of balance (*bózhó*) is maintained. Diné spirituality is geomancy focused on both earth and sky. Earth Woman placed wind in the four cardinal directions as a guide for people to live by (McNeley, 1981). It is said that there are "winds lying on one another" in a manner which seems to link psychology with religion, ecology, and systems theory. The East wind, called "Word One," is female, gives guidance to life, and is the most holy. The South wind (Word Two) is male, the West wind (Word Three) is female, and the North wind (Word Four) is male. The alternation of genders implies both a dichotomous structure and a need for balanced inclusion. This strongly evokes the yin-yang dynamics of Asian faiths. Yet, the Diné judge winds as sacred or profane; harmful or problem-solving. The Revolving Wind, the Coiled Wind, and the Striped Wind have strong negative connotations. The Windway ceremony evokes a complex pantheon of advisors including Dark Wind, White Wind, Blue Wind, and Yellow Wind. Winds whisper lies, warnings, and sound advice. Few cultures have as deep and complex a relationship with wind as the Diné Nation.

Apache people of many nations and bands are all Athabaskan cousins of the Diné. Keith Basso's work on the ethno-linguistic meanings of place names in the Western Apache landscape explores how people assign stories and moral narratives to sites (Basso, 1996). Wind, while not the focus of Apache practice, is part of how the lessons of past events are foregrounded in the naming of places. Nature and oral history merge into a physical map for finding our way ethically.

The Spanish Empire's legacy in the Southwest is indelible. Hispanics comprise 46% of New Mexicans, 30% of Arizonans, and a high percentage of West Texans. In the "Old World" wind-fertilized crops such as wheat, oats, and rye – sometimes ground by windmills – provided part the huge food base that helped give Spaniards and other Europeans their "Guns, Germs and Steel" advantage over the rest of the world (Diamond, 1999). The Spanish arrival in the Americas was also driven by wind. Sails filled by The Trades pushed the Spaniards across the Atlantic Ocean to realize their dreams of conquest. The civilizations they overtook were also fed by the movement of air. Wind-pollinated corn was a staple of the Maya and Aztec. Spanish colonization of the Southwest was along arid, dusty *caminos* including traces such as New Mexico's infamous *Jornada del Muerto* – "The Journey of Death." The 1680 Pueblo Revolt in New Mexico was in part ignited by a decade of drought and intense dust storms (duBuys,

2013). The Spanish/Catholic hold on Native people weakened as they struggled to grow food in the maelstrom, perhaps asking, "What kind of God can't make it rain?"

As a result, Spanish-derived names for winds abound in both hemispheres. "Tornado" is from the Spanish *tornare* "to turn" or *tronada* "thunderstorm." The hot dry winds blowing down from the mountains into San Francisco and Oakland, Californian are called "The Diablo" – The Devil. In Mexico (both past and present boundaries), spring winds make growing crops, raising livestock – every trade – a true challenge. However, a shared name for the spring wind does not exist on either side of the border (Aguilar Melantzón, 2002).

Anglos in the Southwest have been abraded by strong winds like all those that preceded them. The Dust Bowl era stands as one of the most heart-and-land-breaking episodes in United States history (Worster, 2004; Egan, 2006). In the 1930s, the Great Plains of northeast New Mexico and west Texas, the Oklahoma Panhandle, and lands extending north to Canada were accosted over and over by brown-black clouds of dust, fetched up in part because of imprudent plowing of sensitive soils. Anglo farmers and ranchers suffered alongside their Native American and Hispanic neighbors. It was a socio-ecological calamity. While residents of Great Plains states called dust storms "dusters," "black blizzards," and "black rollers," none of those names stuck or were assigned specifically to the Southwest.

4. *El Cabrón*

We propose "*El Cabrón*" as the name for the Southwest's intense spring wind. It has a range of meanings in Mexican, Chicano, Hispano, and Tejano slang – ranging from "Old Goat" to "Bastard" to "S.O.B." It may seem a crude choice, but let us explain.

No Native American name felt appropriate. Those disparate cultures have been ransacked, stripped of land, commodified, abused, and misrepresented for centuries. We choose to honor Indian people by not suggesting a name for the spring wind from any of these cultures. Too much has already been taken from them. This decision is not meant to exclude Indian people, but as a sign of respect for their heritages. From a more practical standpoint, how could a name possibly be selected from three dozen indigenous nations in the Southwest and agreed upon?

Choosing a name in English would only send a message of marginalization to the "minorities" of the Southwest, who in many areas are the statistical and cultural majority. Besides, no obvious name arose from years of inquiries to long-term Anglo residents of the region from Raton to Patagonia, from Ramah to Jal. Mostly we got a shrug of the shoulders or a look saying "leave me alone." The spring wind is like death and taxes; unavoidable and best not talked about.

We chose a name in Spanish because it is a flexible language that links Native Americans, Hispanics, and Anglos in diverse ways – more than English given the prevalence of Spanish-speaking "Indians" with Mexican surnames and Anglos who grew up conversing in Spanish with classmates and co-workers. Spanish has deep roots in the Southwest, certainly nowhere near as deep as Indian languages, but it was used by Native people as a *lingua franca* during the Pueblo Revolt and remains widely spoken today in "Indian Country."

Spanish contains a number of literal words and mundane phrases for powerful dusty winds. *Viento fuerte* simply describes a strong wind. *Tormenta del polvo*, *tormenta de tierra*, or *strom polvo* is a dust storm. *Ráfagas* refers to dusty gusts of wind. A sand storm is a *tormenta de arena*. We asked numerous Spanish-speaking scholars in the Southwest whether a more evocative slang term existed for the spring wind and they all responded with an amazed "No." Dr. Patricia McGregor-Mendoza, a linguist at New Mexico State University, agreed that a name just might have to be conjured (although she has no affiliation with our offering).

So, we propose *El Cabrón*. Etymologically, it comes from the Spanish for goat: *cabra*. Inspiration was drawn from Spain which is the home of the *descuernacabras*, "wind that de-horns goats" and the *matacabras*, "wind that kills goats" (Null, 2000; DFR, 2015). The translation of *El Cabrón* as "Old Goat" is inoffensive and suitable for children and weather broadcasts. The term is even widely used by Hispanic men as a term of endearment. *El Cabrón* or simply *Cabrón* also means a range of coarse epithets, each one more inventively conjugated than the next. So the name seems flexible and familiar enough for widespread, creative use. *El Cabrón* is a slang expression immediately understood by Native Americans, Hispanics, and Anglos across the Southwest. We floated the name to hundreds of university students over the years and received mostly laughter and knowing nods. It just seems to fit somehow as a good-humored reaction to all those terrible dusty days.

But the name goes deeper. Puns, wordplay, double meanings, and making light of what is heavy are

important coping mechanisms of Native American, Hispanic, and Anglo cultures in the Southwest. During *El Día de Los Muertos* ("The Day of the Dead") people erect altars to the deceased, display skeleton figures, eat meals at graveyards, and scoff at death and decay. *El Cabrón* may serve a similar function. It can act as a kind of "sacred clown"; a name that demystifies or makes earthy fun of a serious event.

The levity is needed. The Southwest is a place of intense conflicts over land tenure – whose land it is, whose it was, and what should the land be used for. The collisions have been relentless and violent. Over thousands of years, the region has been claimed by many people: Anasazi, Mogollon, Hohokam, Pueblo, Athabaskan, Comanche, Spanish, Mexican, and Anglo. The conqueror becomes the conquered, empire gives way to empire, yet Nature remains the sovereign. The losses for all who came here have been extreme; the joys abundant yet fleeting. The intense spring winds reminds us all of an ancient power that cannot be usurped. *El Cabrón* wreaks havoc, harms health, causes traffic deaths, damages property, steals the soil, and frustrates

our best laid plans. We cannot deny this climatological truth. All we can do is adapt with as much humility as we can muster. Perhaps the best strategy is to smile and curse the dusty wind, but in a way that expresses our stubborn pride in the rite of passage it brings and our wise sense of humor about surviving tough times.

There is geographic specificity in the name *El Cabrón*. While some would include the entire Southwest, we propose that it best applies in the region (Figure 2) where the specific meteorological setup and prolific dust sources collide. Each year, people living here emerge from winter's chill and enjoy the warming days only to cringe as an era of dust arrives that must be endured before the return of summer and its hope for monsoon rains and renewal. One more season of *El Cabrón* – we say – and the land will be green with infinite promise again. But beyond that verdant dream is an arid message about our mortality. Earth to earth, ashes to ashes, dust to dust.

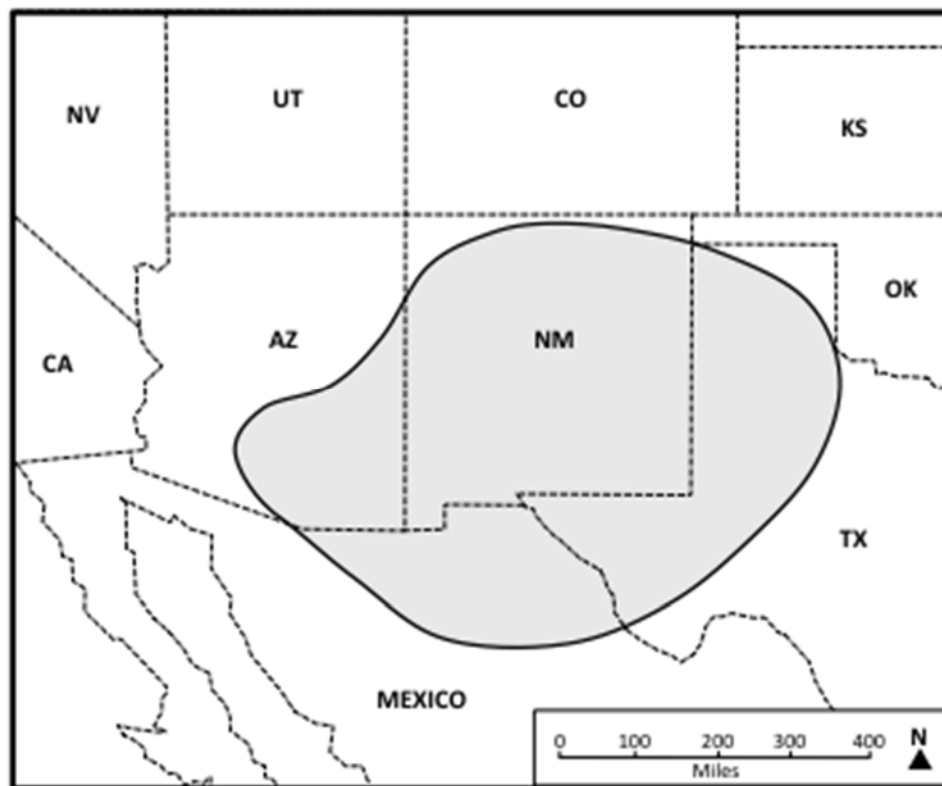


Figure 2. Proposed region of *El Cabrón* (in gray).

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