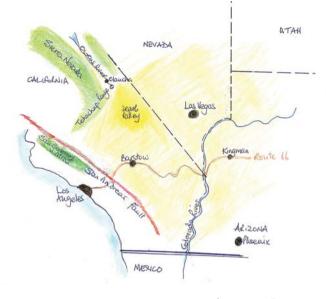
The Mojave: a desert for flower- and film-lovers James Fitzmaurice with Gwyn and David Sivertsen

What you are reading here results from our joint efforts. I, Jim, left Arizona after some 35 years of gardening in Flagstaff. *Tritoma*, red hot poker, was my signature flower, because it could survive the arid spring months and the intense sun of the summers. I now live at the edge of the Peak District in South Yorkshire, where conditions are a great deal different. Gwyn and Dave, who have long resided in the LA suburb of La Cañada, combine knowledge of photography and botany. They grow citrus in their front garden and taught me to pick passion fruit, which has become naturalized in various parts of the LA basin. The three of us, over 25 years, have walked through portions of the San Gabriel Mountains in California and have floated a variety of rivers in the American Southwest, in particular the San Juan River as it makes its way through southern Utah. We like to talk native plants, odds and ends of wildflowers, cultivars, edible plants – all the while keeping an eye out for any fauna, which can include the occasional bighorn sheep or mountain lion.



Fig. I Where the Joshua tree, Yucca brevifolia, grows, it is high desert.



Let's begin consideration of the Mojave Desert with some memories. When I was a child of perhaps six, my parents decided to drive from where we lived on the coast of California across the Mojave to Gunnison in the mountains of Colorado. In those days there was no interstate highway system, so we traversed the intimidating Mojave on a two-lane road with a water bag dripping in front of the car's radiator. We travelled on the famous Route 66, and the toughest stretch



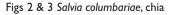
was between Barstow and Kingman, both towns immortalized in the 1946 song written by Bobby Troup. We may have crossed at night, which was the usual thing to do. I think I slept.

More than fifty years later, I made the same journey in the opposite direction in a 1997 Subaru, accompanied by my son, Stephen, who drove a 1952 GMC threequarter-ton pickup truck. The truck was once my grownup's toy and had become his, to take to his home in California. As we pulled off Interstate 40 and into the

town of Needles on the Colorado River, the GMC began to sputter. The outside temperature was 123 Fahrenheit, but we knew better than to turn off the engine. Rather,

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we chucked a bucket of water into the radiator and saw the needle on the temp gauge drop below 225, evaporative cooling doing its work. After waiting a few hours for the sun to go down, we drove off into the night. West of Barstow and now on Interstate 15, we saw the first of thousands of Joshua trees (fig. 1), *Yucca brevifolia*, emerge from the darkness. Where the Joshua tree can grow, there is the Mojave, for it is high desert.

Although the Joshua tree is a delimiter of high desert, this is not to say that you must be looking at a *Yucca brevifolia* to be in the Mojave (pronounced mo-hav-eh, or merrily mispronounced mo-jayve). There are other, less technical, markers of the Mojave, high and low desert. The Space Shuttle used to land at the western edge on Rogers Dry Lake, a salt pan which was also a part of the location for the film *The Right Stuff*. The bar and the lady barkeeper at the film's beginning sum up much of what is found in tiny towns that dot the Mojave from one end to the other. The southern part of the region bumps up on the west against the San Gabriel Mountains and on the north against the Tehachapi Range. The Desert includes parts of California, Nevada, Arizona, and Utah. Las Vegas is pretty much dead centre and the only city of any size. To the south, the Mojave almost imperceptibly gives way to Sonoran low desert.

Let's begin by making a jog to the east and north of the Tehachapi Range on to a little finger of the Mojave that contains the small town of Olancha in the Owens River Valley in California. The Owens River figures as a key, if mysterious player, in Roman Polanski's *Chinatown*. The film is about murder and incest, but also the theft of water rights, and there is an allusion to Californian history. Many people today will tell you that water from the Owens River was stolen for Los Angeles by William Mulholland during the first half of the twentieth century and that the theft continues. To the west of the Owens Valley are the Sierra Nevada Mountains, which contain the world's largest plant, the California Redwood. To the east are the White Mountains, which contain the world's oldest plant, the bristlecone pine. To the east of Olancha along State Route 190, and at an elevation of three or four thousand feet, we find long blue-purple chia, *Salvia*



Fig. 4 Lupine longifolius, bush lupine

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Fig. 5 Campanula medium, Canterbury bells



Fig. 6 Eschscholzia californica, California poppy

columbariae (figs 2 and 3), a plant that is sometimes used as a cultivar. Gwyn and Dave think that the chia nuts have a watermelon taste. Mono Lake is not far away, another location for films including *High Plains Drifter*. Close by is Death Valley, where Michelangelo Antonioni's *Zabriskie Point* was filmed.

Due south of Olancha and a little west, on the edge of the San Gabriel Mountains, in the Angeles National Forest is the location of a series of fires that took place in summer 2009. Each fire was given a name. The Station Fire resulted in bush lupine appearing in huge masses in the spring of

2010 (fig. 4). It is heartening to remember that, when there are fires such as those burning this current summer (2012) in Colorado, the following spring will bring a bumper crop of selected flowers. I have always regarded lupine, a favourite of my mother's by the way, as a wildflower. I was not a little surprised to find it a popular garden flower, lupin without the final e, in England, one that can be yellow or red and not always blue. No fires are needed to get it to bloom in England, and, of course, there is the Monty Python skit (now on YouTube) based on a highwayman who steals lupines from unwary travellers.

Another fire-follower is Canterbury bells (fig. 5), which prompts me to explain something about fires and the plants that follow them. During the 1950s, along the roads in the Angeles National Forest were signs depicting a bear named Smoky wearing a WWI campaign hat. The bear said, "Only You Can Prevent Forest Fires". Three ideas





Fig. 7 Washingtonia filifera, native palm

were at work: first, human beings cause forest fires, which would not occur otherwise; second, forest fires are bad; third, bears wear hats. All are wrong. Generally speaking, forest fires are caused by what is called dry lightning. Most of the time lightning is accompanied by rain, which puts out the fires, but sometimes there is very little or almost no rain. The storms generally occur in summer and, unsurprisingly, are called "monsoons". Fire, we now know, is a natural part of the cycle of various plants across landscape. Fire-followers are followed by other plants, which then are followed by still others, and so on until a stasis is reached with a climax community – or another fire occurs. Gardeners who want to grow fire-followers often scatter seeds and then build a pile of pine needles over them. The pine needles are burned and the heat cracks open the seeds, which then germinate. Fires also encourage wildlife as is the case with a bird called the lazuli bunting. This fire-follower is bright blue and rust, with a sweet song.

One last fire-follower is the California poppy, *Eschscholzia californica* (fig. 6), the state flower of California. It is much appreciated in the early spring, when it covers hillsides in yellow blankets, not just in California but across the Southwest generally. It is also invasive, so take care if you decide to plant it in your garden. I am told that a scent based on the flower was popular in the UK during WWII.

Having visited the San Gabriel Mountains, let's move south and east to what is more recognizable as desert and find an oasis. The oasis we have chosen is home to the only palm native to North America, *Washingtonia* (fig. 7), which likes to put its roots down in earthquake-prone areas such as this, where fissures create seeps and springs. Notable among the geological faults is the famed San Andreas. Do you remember the *Superman* film in which it figured? Along with the *Washingtonia filifera* is a *robusta*. Both species can grow to 20 metres in height and *filifera* is widely used as an ornamental in Southern California. The fruits of both can be eaten by humans and are consumed by birds and moth larvae. Close by this oasis is the posh retirement community of Palm Springs. Bob Hope, Bing Crosby and Frank Sinatra built vacation homes here in the 1930s, presumably because the settlement is no great distance from Hollywood. It is still a popular place to go for golf in December and January.



Fig. 8 Datura stramonium, Jimson weed



Gwyn Sivertsen

Fig. 9 Calochortus nuttallii, sego lily

From the oasis, we turn east on Interstate 10 and head out in the direction of Phoenix, Arizona. Along the side of the road every now and then *Datura stramonium*, or Jimson weed, is to be seen (fig. 8). This bane of ranchers and killer of cattle, also known as locoweed, is easily recognizable from paintings of it made by the New Mexico artist Georgia O'Keeffe. Clearly it grows by the side of the road because the tarmac channels water to it. There were stories, among professional river runners who lived in Flagstaff, of those among their number who, thinking they were imitating the religious practices the American Indians, would eat a seed, seeking a hallucinogenic experience. This experience of "sacred datura" is not recommended.

As we move east through the Mojave, we will encounter *Calochortus nuttallii*, or sego lily (fig. 9). This flower is admired by hikers and river runners alike. It ranges widely, growing beyond the Mojave up into the states of Washington and Montana. It tolerates dry conditions and may be found surrounded by sagebrush on gravel slopes, striking in landscapes that have little or monotonous colour. I first learned of it as the Mariposa lily. I remember its shiny petals especially from a time I spent at the confluence of the Green and Colorado rivers in Southern Utah. The bulb works well as an emergency food for hikers; I may have tried it, but if so it was a long time ago and I don't remember the taste. It is the state flower of Utah, perhaps because it served the Mormons well during lean years in the nineteenth century. Bighorn sheep eat the seed pods.

Were we to continue on Interstate 10, we would leave California and enter Arizona. But instead we branch off and head northeast after passing Joshua Tree National Park. Heading on 95 towards Kingman, which is over the state line in Arizona, we find Virgin's Bower, *Clematis lasiantha* (fig. 10). This plant's widely spread throughout the region, so we really did not need to pass this way to come across it. White or pipestem clematis, as it is also called, is striking when it appears as a tangled, flowering mass in the shrub/heathland known as chaparral. It will cover a Manzanita as tall as 3–5m, so that the evergreen tree, now merely an armature, disappears. The clematis flowers eventually develop feathery ends which traditionally have worked nicely as tinder for hikers. In



Fig. 10 Clematis lasiantha, virgin's bower



Fig. 11 Castilleja chromosa, Indian paintbrush

the past, it was used as a medicinal herb by Indians.

The small city of Kingman, Arizona, is on the eastern edge of the Mojave. It is at Kingman that we join Interstate 40, which divides from old Route 66, and takes a direct route through the jagged Black Mountains towards Flagstaff. Nevertheless, old Route 66 still remains, running north and skirting the mountains on its way to the tiny town of Seligman. Popular with nostalgia buffs, this segment of 66 is the longest remaining stretch that still retains any of its



Fig. 12 Garden tomatoes in "high desert" conditions

1930s and 40s flavour. All along both Route 66 and Interstate 40, bright red Indian paintbrush, *Castilleja chromosa* (fig. 11), may be seen, along with its cousin, *C. miniata*. Paintbrush, a figwort, sometimes appearing in yellow, was another of my mother's favourites, and it grew behind my house in Flagstaff. The image printed here conforms to my memory of how the flower grew where I lived, because the plant appears to be on a hill and at the lower edge of a flat rock. The rock diverts rainwater on to the plant and also prevents evaporation from the soil beneath. In the winter, the rock collects heat from sunshine and helps to moderate temperatures. The house, situated on a south slope, was in what was called "the banana belt": Flagstaff, at 7000 feet, was a cold and snowy place in the winter, though there was a great deal of sun between snow storms.

In an attempt to imitate the ways of the Indian paintbrush, I have surrounded my tomato plants in South Yorkshire with bricky rubble (fig. 12). There is little need to have the tomatoes on a hillside or to collect water, but there does tend to be a lack of summer sunshine, and temperatures are rarely consistently warm enough to make a tomato plant entirely happy. As I have learned, most people who want to grow tomatoes in the southern Pennines set up greenhouses. Maybe I will, too, some day, but for the present I imitate Flagstaff conditions and catch heat from the sun in my bricks.

Let me end with a recommendation of a book I use: Peterson's *Field Guide to Rocky Mountain Wildflowers*. The title is a bit misleading, since many of the wildflowers that are described can be found away from the Rocky Mountains. The book has been updated as well as retitled in the new edition and works well for the American and Canadian West generally.

James Fitzmaurice taught Shakespeare and other English literature classes at Northern Arizona University. Now retired, he is Director of Distance Learning for the School of English at the University of Sheffield, and enjoys exploring the far-fromdesert-like Pennines.