MOJAVE LIMESTONE

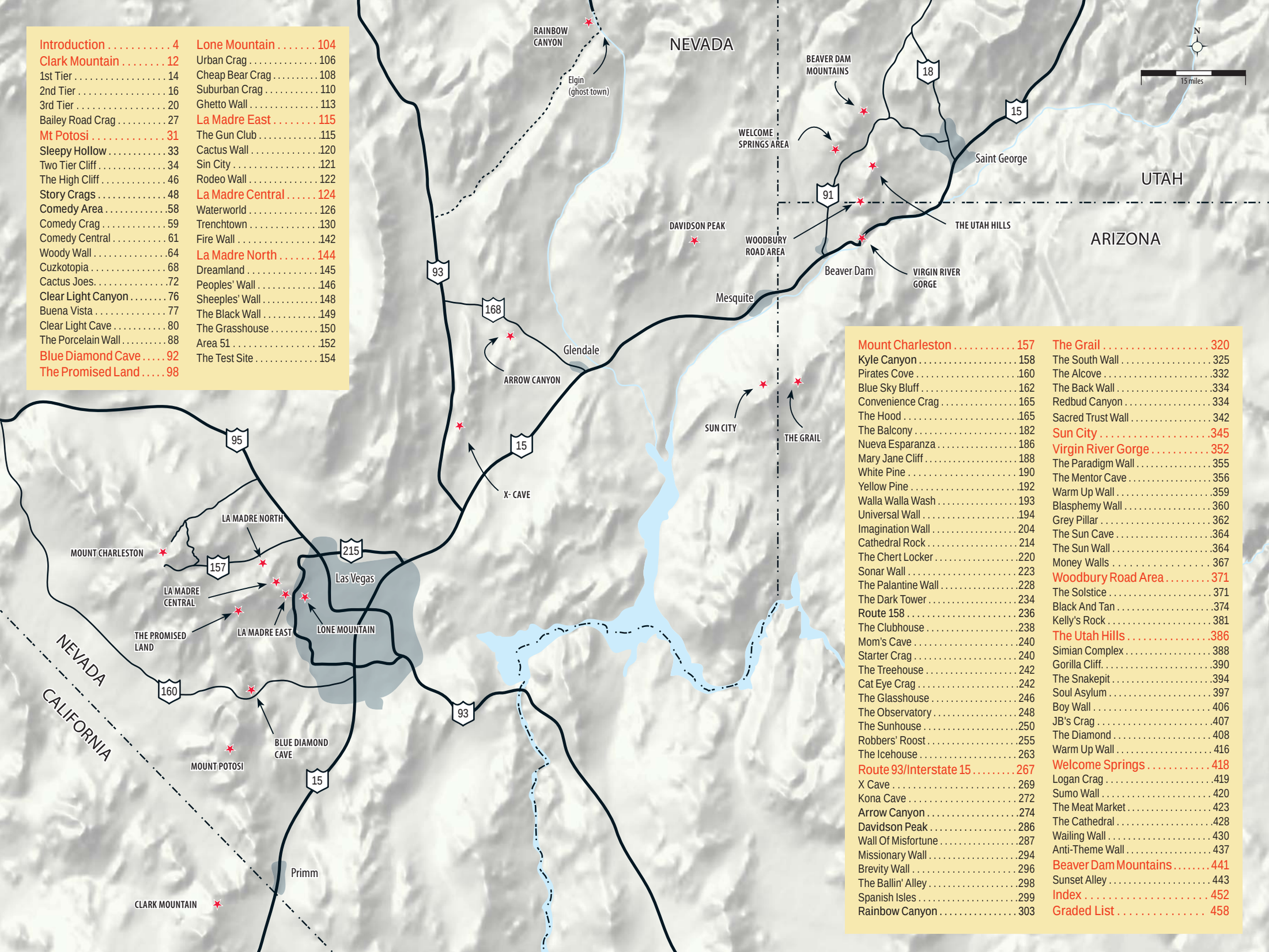
by Jerry Handren

ISBN - 978-1-7923-4959-1
Printed in China.

Warning! Read before using this book.

Climbing is an extremely dangerous activity. Always use judgement rather than the opinions represented in this book. The author assumes no responsibility for injury or death resulting from the use of this book. The information in this book is based on opinions gathered from a variety of sources. Do not rely solely on the information, descriptions or difficulty ratings as these are entirely subjective. If you are unwilling to assume complete responsibility for your safety, do not use this book.

The author and publisher expressly disclaim all representations and warranties regarding this guide, the accuracy of the information herein, and the results of your use hereof, including without limitation, implied warranties of merchantability and fitness for a particular purpose. The user assumes all risk associated with the use of this guide.



Steve Lapen on Hasta La Vista (5.14b/c)
Page 180.

About this guidebook

There is a spine of high limestone mountains running through the northeastern quadrant of the Mojave Desert, most of which are ringed with long cliff bands. This guidebook describes 2500 rock climbs found in and around these mountains. The area covered is based upon the cities of Las Vegas and Mesquite in Southern Nevada with some of the crags being in California, Southern Utah and Arizona.

With the exception of Rainbow Canyon, where approximately half of the routes are traditional climbs, the routes covered in this guidebook are fully-bolted sport climbs. As a sport climbing venue this area has few peers anywhere in North America thanks to the year-long climbing season, the reliable weather, the low-hassle desert camping and above all the quantity, variety and quality of the routes.

The areas most famous routes are iconic, nationally known test pieces such as Chris Sharma's Jumbo Love on Clark Mountain, the gorgeous Golden For A Moment and its maze of variations in The Cathedral, and the long, crimpy pucker-fests of the Virgin River Gorge. But more importantly for the vast majority of climbers, there is a real depth of quality climbing throughout the entire grade range. Also, perhaps more so than any other of North America's premier sport climbing areas, the routes are extremely varied in almost every aspect. There are perfectly formed 20' micro routes on Gorilla Cliff and brilliant eight pitch 5.14s on Universal Wall, there are routes of almost every grade, on rock of almost any angle, that use holds of every type imaginable.

It seems likely that, as time goes by, the importance of this region as an epicenter for North American sport climbing will only increase. The amount of rock available and the pace of development are such that future editions of this guidebook will probably require two or even three volumes.

Jerry Handren. December 2020.

The land, rules and regulations

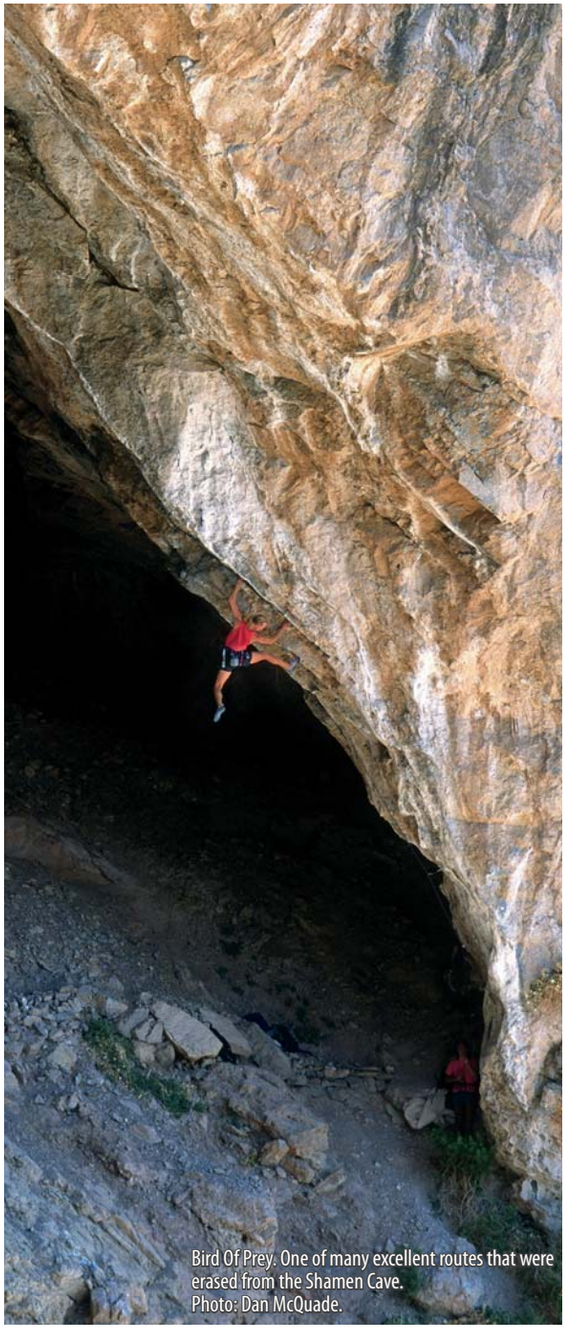
Almost all the cliffs described in this guidebook are on public land. The two agencies responsible for this land are the US Forest Service and the Bureau Of Land Management. However, there is a veritable smorgasbord of different designations within those two jurisdictions, each with its own set of management policies and rules.

The designation most relevant to climbers is "wilderness". Currently, no new bolting is allowed in wilderness areas; bolt replacement is permitted but only with hand drills rather than power drills. Many cliffs were bolted before the current rules were formulated and so there are quite a few cliffs described in this book where the existing routes are tolerated but new bolting is not allowed. To make this clear I mention where any cliff is known to be in wilderness. Unfortunately, the wilderness boundaries are not always perfectly obvious and so some cliffs may be mislabeled; when in doubt the best policy is to contact the local land management for guidance.
Fixed quickdraws in wilderness areas is an issue that hasn't been fully dealt with yet, but it is probably tempting fate to have cliffs that are in wilderness areas festooned with draws. In recent years the managers of Arrow Canyon have asked that all fixed draws be removed from that location and it seems likely that this request will be repeated elsewhere.

It is worth remembering that land management agencies are capable of completely erasing a climbing area. This is something that happened in the Las Vegas area in the early 2000's when around 30 great routes were completely removed from a cliff called the Shamen Cave in the Desert National Wildlife Refuge. The land managers subsequently completely banned climbing anywhere in the refuge, an action that was largely taken because they didn't feel that climbers could be trusted to act responsibly. Climbers operating on cliffs in the wilderness need to tread lightly or risk losing the privilege.

Much of the rest of the BLM and Forest service land is open to climbing with few restrictions at present. One of the really nice aspects of this land is that wild camping is also relatively unrestricted and often very pleasant. The only rules being to observe fire restrictions, limiting stays to 14 days and to pack out all trash.

More localized rules, restrictions and guidelines are dealt with in the introductions to the various regions and climbing zones.



Bird Of Prey. One of many excellent routes that were erased from the Shamen Cave.
Photo: Dan McQuade.

The Rock

Although Southern Nevada is best known for the great escarpment of Red Rocks, Red Rocks is really just a tiny island of sandstone surrounded by a vast sea of limestone. One of the nicest aspects of this limestone from a sport climbers perspective is that it is a rock that offers incredible variety, and that particular quality is especially true of the cliffs described in this book. Not only do the individual routes tend to have many different types of hold which makes for really enjoyable, unpredictable, 3-D movement, but the different cliffs offer all types of terrain from immaculate grey slabs to huge, drip-featured caves and everything in between.
The biggest drawback to this limestone is that it can be sharp, sometimes razor sharp. In many situations it doesn't take much at all for the rock to chew through the sheath of a weighted rope. It is important to be on the lookout for sharp edges, to pay attention to the path of the rope and to have strategies to help mitigate any potential issues.
As well as being hard on the ropes, the rock can be hard on your finger skin. Tape, clippers, a file and some type of new skin/glue to help patch flappers are essential parts of your daily climbing kit. In general, it's best to slap on the tape as soon as a hold starts to chew your skin; worn skin recovers quickly but a hole that's deep enough to bleed can take a while to repair.

Much of the rock is fantastically solid and reliable, but loose, blocky rock is also quite common and often not as easy to spot as you would like. Furthermore, in the author's experience, it is quite common for blocky bits to suddenly become apparent in sections that had previously seemed solid. The bottom line is that you should climb cautiously when confronted with blocky rock and be aware of the potential consequences for your belayer and other climbers in the vicinity. If you are at the base of the cliff it's a good idea not to camp out inside the potential drop zone of someone who is climbing.

Unlike the nearby sandstone of Red Rocks, Snow Canyon and Zion, limestone is only slightly weakened by being wet. Also, in general the rock tends to dry almost instantly after rain. This makes the cliffs described in this book a really useful alternative to the sandstone areas after rain. Once the rock is visibly dry it is reasonable to climb. The only caveat being that after long wet periods certain parts of some of the cliffs are prone to seepage which, once it has started, can linger for a while.

Overall, thanks to the superb rock and despite the negatives mentioned above, this area provides some of the best sport climbing in the USA as well as some of the most reliable year round climbing conditions.

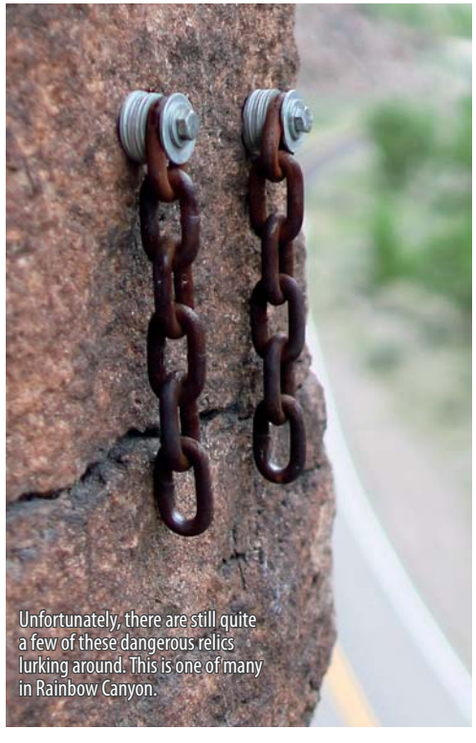
Bolts, fixed quickdraws and anchor hardware

Limestone is not a rock that lends itself to natural protection, and so almost all the routes described in this book are fully-bolted sport climbs. For better or worse, people who climb on these routes are completely reliant on bolts for their safety. It is outside the scope of this book to try and educate climbers on the ins and outs of bolt safety, but the bottom line is that bolts occasionally fail and that, as much as possible, climbers must try and avoid situations where their safety is entirely dependant on a single bolt. It is worth any climber's time to try and learn the basics of bolts so as to be able to recognize a suspect bolt. Report bad or suspect bolts to the Southern Nevada Climbers Coalition for the areas around Las Vegas. For the areas around Mesquite contact the Southern Utah Climbers Alliance. Mountain Project and Facebook are a good way to do that. When reporting a bad bolt, it is very useful to the re-bolters if you include a picture.
Climbers should have a small adjustable wrench in their pack to snug-down loose bolts, but understand that it is vitally important not to overtighten as this can cause damage.

As well as the bolts themselves there is a certain amount of fixed hardware on almost all the cliffs throughout the region. Most commonly, anchors have chains, carabiners and other hardware that is in place for convenient lowering from the top of the routes. This hardware tends to wear out quite quickly and climbers should be prepared to check and evaluate all fixed hardware prior to committing to it. The same is true of fixed quickdraws which are becoming increasingly common on the most popular routes and sectors.

It is important to remember that all this equipment has been placed ad hoc by a random assortment of climbers over many years. Although the Southern Nevada Climbers Coalition and The Southern Utah Climbers Alliance do a fantastic job of maintaining hardware in their respective areas, these are volunteer organizations with nowhere near enough time and resources to do this work in a complete way. It is every climbers individual responsibility to be able to evaluate the equipment that they are trusting their lives to.

The American Safe Climbing Association helps provide a lot of the hardware that local organizations use for the upgrade and maintenance of local climbing areas. If you are a rock climber in the USA then this is an organization that deserves your support. Donations can be made through the ASCA website; www.safeclimbing.org. The website is also a useful source of material for those who want to try and learn more about the details of the placement and evaluation of bolts for rock climbing.



Unfortunately, there are still quite a few of these dangerous relics lurking around. This is one of many in Rainbow Canyon.

Staying in the area

Transport

There is no public transportation system, so when visiting the area a vehicle is essential. If renting a vehicle, it is worth considering spending the extra money for an SUV since quite a few of the access drives are on dirt roads, some of which can be quite rough. Gas stations are nonexistent throughout large swathes of the region. It is a good idea to be conservative and to fill up when you can.

Camping and Accommodation

The best way to enjoy the Mojave is to camp out in the desert. For most of the region, other than the immediate Las Vegas area, wild camping is relatively unrestricted and often very pleasant. The only rules being to observe fire restrictions, limiting stays to 14 days and to pack out all trash (this includes toilet paper, burying is not an acceptable option).

Around Las Vegas camping options are more limited. Wild camping is not allowed anywhere in Clark County. The Red Rock campground is an established campground near the entrance to the Red Rock Scenic loop road. It is open from September to May, but is often fully booked. There is some open forest service land in Lovell Canyon to the west of Red Rocks and also on the southwest side of Mount Potosi. Mount Charleston has seven established campgrounds that are open during the summer season, but again these are very popular and often get fully booked up. There are also a few pockets of forest service land on the mountain where wild camping is allowed.

Hotels and Air B&B are popular options for Las Vegas and Mesquite. In Mesquite especially, hotel rates are very reasonable and this is certainly an option worth considering if the weather really craps out.

Groceries

Las Vegas, Mesquite and Saint George have large grocery stores, but most of the rest of the region is limited to a handful of gas-station convenience stores.

Climbing Equipment

Desert Rock Sports at 8221 West Charleston Blvd. in Las Vegas is a fully-stocked climbing store (702 254 1143), open seven days a week. In Saint George there is The Desert Rat at 468 West St. George Blvd. which is closed on Sundays (435 628 7277).

Climbing Gyms

There are four gyms in Las Vegas. Origin Climbing and Fitness, The Red Rock Climbing Center, The Refuge and Southern Nevada Climbing Center. All four gyms also offer showers. At the time of writing a gym, "Contact Climbing" was being built at 2865 E.850N. Street in St. George.

Weather and Conditions

The cliffs described in this guidebook sit at a wide range of elevations. At 2000', the Virgin River Gorge is the lowest, at 10,000' the Icehouse on Mount Charleston is the highest. As a rule of thumb, the temperature goes down 5^0F for every 1000' of elevation gain. What this means is that on any given day throughout the year there are likely to be at least a few cliffs where temperatures are perfect. Spring and fall are the seasons when you will have the most options, but summer and winter both have a lot to offer as well.

This is the Mojave Desert, one of the drier places on earth. Although rain is not very common in general, the region is sometimes subject to weather patterns that result in rainy periods that can last for several weeks or longer. Almost all of the cliffs are composed of limestone which is very quick to dry, and only slightly weakened by moisture. The rock is therefore climbable shortly after the rain stops, just don't climb on rock that is still visibly wet. Even during the rainiest spells it is usually possible to eke out plenty of climbing.

Limestone cliffs are sometimes prone to seepage after longer periods of rain, this is particularly true at the higher elevation areas if it has been a wet winter. Accumulations of slowly-melting snow can keep some of these cliffs (particularly the cave sectors) seeping well into the spring and early summer. Most years this problem is limited to a few individual routes on a few cliffs, but some years it can be more widespread.

I have included a paragraph with some basic information about conditions for each crag and/or area. This usually includes information about elevation, sun versus shade, exposure to wind, the range of workable temperatures and the best seasons to visit.

The almanac numbers for Las Vegas, which sits at an elevation of around 2000' are as follows. Average temperature 66.3 degrees (19 degrees centigrade). Average yearly rainfall 4.13 inches (10.64 centimeters). Average daily humidity 29 percent. 211.5 clear days annually, 82.4 partly cloudy days, 71.3 cloudy days. The numbers for Mesquite are almost identical.

Month	Average Daily Low (°F)	Average Daily High (°F)	Sunny Days	Average Rainfall (inches)
January	33	56	24	0.5
February	37	67	22	0.46
March	42	68	25	0.41
April	49	77	26	0.22
May	59	87	27	0.22
June	68	98	28	0.09
July	75	104	27	0.45
August	73	101	26	0.54
September	65	94	28	0.32
October	53	81	27	0.25
November	41	66	24	0.43
December	33	67	24	0.32

Access

The entire area is served by Interstate 15 which runs from Los Angeles in California to Salt Lake City in Utah and beyond. In general driving from one of the areas in this guidebook to another is fast and easy, although it's best to avoid rush hour in Las Vegas and driving to Clark Mountain on a Sunday afternoon.

One of the key factors with transportation in the area is that access to the majority of the cliffs involves driving on dirt roads. Many of these roads are well-maintained to the point where you could comfortably roll up to the crag in your lowrider. However some of the roads are very rough and require four wheel drive, decent clearance and a bit of experience. The author drove to every cliff in this book multiple times with a Toyota 4-Runner, but he wasn't always happy about it!

For each crag and area I have included a paragraph about access which provides the basic information that you need to get to the point where you have to start walking. What follows are a few notes about how to use this information.

Odometer readings

The mileage numbers used in the descriptions and maps to indicate landmarks, turns etc. were read from the author's vehicle and can really only be considered a rough guide. Different vehicles, tires, road conditions etc. will knock these numbers off to a certain extent.

Road Conditions

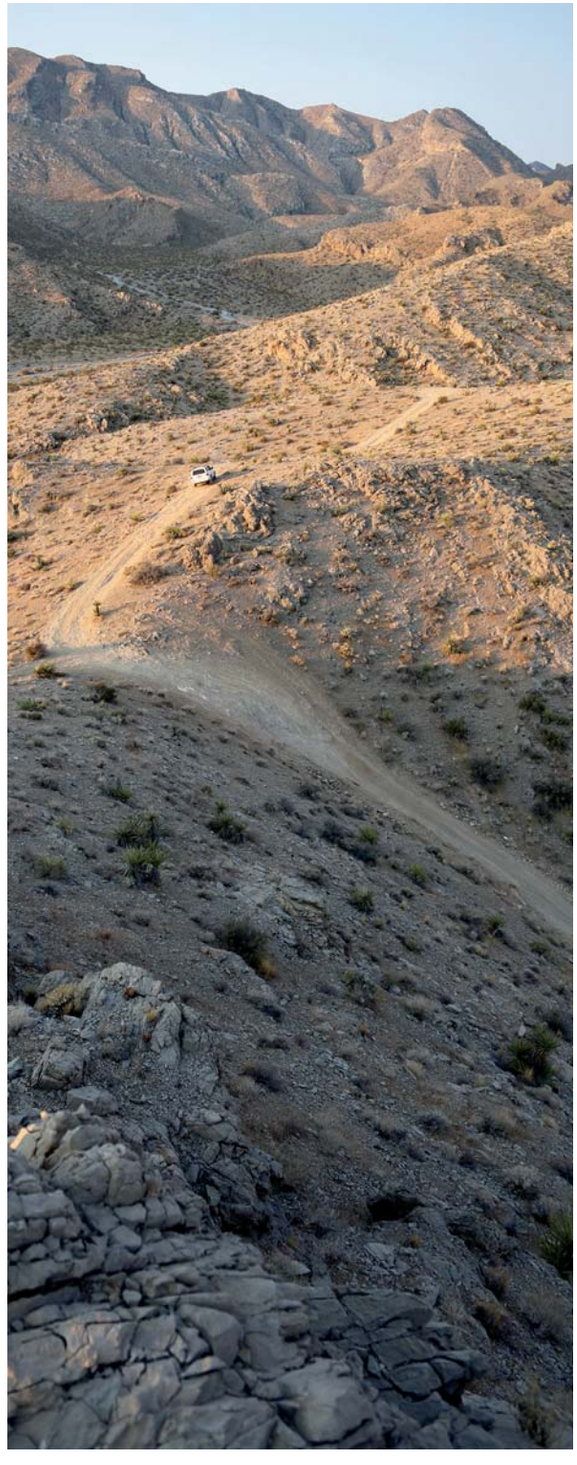
I have usually tried to give an impression of what to expect on the dirt access roads. However, a point to bear in mind is that all these roads are always changing. All it takes is a big rainstorm to wash out a section of road and make what was previously casual, impassable. It is very important that you understand your own experience and the capabilities of your vehicle and be prepared to retreat if the road looks too rough.

Road Closures

Depending on the prevailing policies of the various land management agencies, dirt access roads will sometimes close. This has especially been the case for a few of the areas close to Las Vegas where driving on the traditional access routes is no longer allowed. Be prepared to turn back rather than driving on roads that are closed.

Remoteness

Aside from being rough, many of the access roads take you to very remote places where getting help for a broken down vehicle is not even an option. A charger kit in case of a dead battery is a sensible precaution. A functioning spare tire and knowing how to change it is mandatory. Every vehicle should carry emergency supplies such as extra water, food and warm clothing.



Approaches

For every cliff I include a paragraph which describes how to get to the climbs from the end of the access roads. In most cases these approaches are on well established climbers trails that are easy to follow, but there are also a few places where the approach is more tricky and the descriptions correspondingly more detailed. To help with this process I'll often use approach maps and photographs to make things clearer. For most approaches I include three key bits of information: Elevation gain, distance and time. The elevation gain and the distance are taken from GPS readings and should be quite accurate. It's useful to understand what the time is and isn't. What it isn't is an exact measure of how long it will take you to get to a given cliff. What it is is a measure of how long it takes the author to get to a given cliff, that means someone who knows the way and whose pack is a little lighter than you would usually carry for a days climbing. Most will find that they take a little longer, some a little shorter, but the good news is that that difference will be somewhat consistent for different approaches.

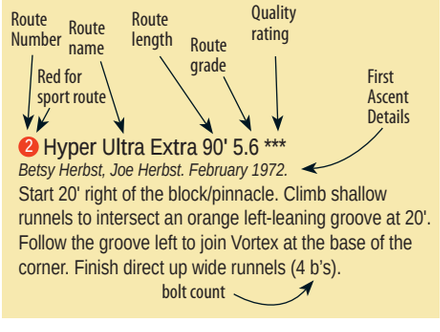
Arrangement of this Guide

This guidebook is arranged as a series of regions, which are described from south to north. A region often corresponds to a major geographic feature such as Clark Mountain or the Virgin River Gorge, but really it is just a way of grouping a set of climbing zones that have similar access. There are also a few cliffs such as The Grail and Promised Land which don't fit in well with other crags and are treated as standalone regions. Each region has an access overview map which shows the main access roads and also the location of the different climbing zones within the region. There may also be more detailed access maps which show the access routes for different parts of a given region.

Each region is subdivided into a series of climbing zones which usually correspond to individual cliffs. Where these cliffs are close together they may all be covered in one approach map, where the cliffs are more spread out, or the approaches more complex there may be an approach map for each individual cliff. The individual cliffs may be subdivided into different sectors, depending on how extensive the cliff is. Almost all the sectors in this book have a photodiagram which shows the approximate line of all the routes within that sector. In a few cases where tree cover or a very narrow canyon has made getting a good crag shot impossible I have used plan maps to show how the routes lay out.

Route Descriptions

For most of the routes in this guidebook I have given detailed descriptions. Since most of the routes are sport climbs where you just follow the bolts, the purpose of these descriptions is not so much to keep a climber on route, it is to help identify the route. This is important because new routes are always getting added to these cliffs and if this is the case then simply counting bolt lines from one side or the other of a sector won't work.



Route Number

Routes within a cliff or sector are assigned a route number. This number is used to identify the route on any photodiagrams or plan maps of that area. In most cases routes are on the same page as their photodiagram. In certain sections, where the route descriptions are spread over several pages, the photodiagram will always be within that section. If a route doesn't have a number then it is not shown in the photodiagram or plan map of that area.

Symbols

A sport climb. A route that is protected exclusively by closely spaced bolts, with a fixed anchor at the top.

A traditional route that uses self placed gear for protection.

Route Names

Generally the route names are those given by the first ascent party. However, there are many established routes and even whole cliffs where I wasn't able to track down the correct route names. Rather than having numerous "Unknowns" I have taken the liberty of providing a name for every route in the guidebook. I apologize in advance to anyone whose route is incorrectly named in this book. In future guidebook editions many route names will undoubtably change as the real names come to light. Hopefully the confusion that this causes is the lesser of two evils. Routes that are currently un-redpointed are named "Project", and where there are several on a cliff they can be numbered "Project 1", "Project 2" etc. I reserve the term "Unknown" for mystery bolt lines where I have no information.

Length

Route lengths are approximate. Getting lowered off the end of the rope is one of the more common causes of accidents in sport climbing. Since many of the routes described in this book are real rope-stretchers **it is vitally important that climbers always put a stopper knot in the ends of their ropes**. This is especially true because many routes are long enough that you can't be lowered from the top anchor to the ground in one go and instead the climber must lower to a mid-anchor, re-attach, pull the rope and be lowered a second time.

Grade

The standard rating system is used: 5.0 to 5.15 with the grades from 5.10 up subdivided into a,b,c and d. This book covers such a large area that there will certainly be variations in grading as you go through the different regions. In general I have tried to use classic routes with well-established grades as my benchmarks, and where routes seem to fall well outside these benchmarks I haven't been shy about adjusting the grade. Having said all that, it's not an exact science and there will no doubt be a wide assortment of gifts and sandbags in the mix. Furthermore there are numerous routes that have had very few ascents and for which there is no real consensus on grade.

Star Rating

This guidebook uses a three-star system to rate the quality of the routes. Obviously this is very subjective and these ratings should be taken with a grain of salt. Certain personal biases no doubt crept into the assessment. So, for the record, I should say that clean rock, sweeping natural lines, and sustained climbing are factors that will push a route up the scale. Poor rock, dirt, a contrived line and ugly, heavy-handed manufacturing will push a route down.

I have tried to be very conservative in doling out stars so that the really good routes stand out; this is mostly to point visiting climbers at the very best routes. The fact that a route has no stars does not mean that it is not worth doing; instead I have tried to mention in the text if a route is really poor quality. In fact, one of the great things about Mojave limestone is that the overall quality of the routes is generally quite high. Another point worth mentioning is that to a certain extent I have used single stars to indicate the better routes at the lower quality cliffs, so that, for example, a one star route at one of the Lone Mountain cliffs is probably not up to the quality of a one star route at one of the better crags such as The Grail.

First Ascent Details

Where possible I have included the names of the first ascent team, although there are many routes for which this information is not available.

Bolt Counts

The bolts counts are approximate and do not include the anchor. It's always best to take at least a couple of extra draws. Fixed draws have become quite common on many of the most popular sectors, but the bolt counts do not reflect their presence or absence.

GPS

A GPS is a useful tool when climbing in this area. Its correct use virtually assures that you'll find your intended cliff, and more importantly, your way back to the car and the main roads. There is more than enough information in this book to find every cliff without using GPS; in fact one crusty local veteran once suggested that if you need a GPS to get there, then you probably shouldn't be there. Nevertheless a GPS is very useful. Just remember that no gizmo is a substitute for good judgment, and understand that batteries get low and devices get lost, wet, and broken.

In the text, I have included some basic GPS data for almost all of the cliffs. Generally, this includes key points on the access roads, the parking area, key points on the approach trail, and where the approach trail hits the cliff. The GPS coordinates in this book were collected on a Garmin Oregon 450 using the following formats:

Datum: WGS 84.
Position Format: Lat/Lon hddd°mm.mmm'

On the website www.mojavelimestone.com I have stored the tracks that I recorded when doing the approach hikes. These can be downloaded onto GPS devices and used to assist with navigation.

www.mojavelimestone.com

To submit new routes, corrections and updates visit www.mojavelimestone.com. The website will also contain extra topos, photos etc. that didn't make it into the book as well as information on new developments.

Maps