

# THE NEW FACE OF STAUN PRODUCTS

By Harry Lewellyn

I'm delighted to announce that I have just been appointed the USA spokesperson for Staun Pty. Ltd. [www.staunproducts.com](http://www.staunproducts.com) ! Remember, they make those terrific "tyre" deflators that I've been promoting for years now, so I already know of its commitment to high quality products. Next month, I'll report on two more great products: the Massojet Under Body Buddy and Staun 329 Corrosion Inhibitor with applicator.



My responsibilities will be multifaceted. I will coordinate with Staun's USA distributor, TJM, based in Knoxville, Tennessee and attend trade shows. This involves manning the Staun booth and presenting technical papers, like on tire deflation, where appropriate. I will also be available for club meetings and trail runs to demonstrate Staun products.

According to Staun's Directors, Lee Davis and Steve Furlonger, "We are delighted to have such an experienced, well-known and highly respected authority on 4-wheeling and related outdoor activities wanting to be a part of our team. We're looking forward to Harry's involvement with our marketing activities in the USA and throughout the world, and

believe it will only strengthen our position."

Staun Pty. Ltd. is not only a well-known 4WD after-market accessories manufacturer in Australia, but their international presence is also increasing significantly. In addition to Australia and the USA, its products are available through various 4WD accessory distributors in the Europe, South Africa, New Zealand, Japan and Israel.

Staun's range of 4WD accessories is headed up by its innovative tyre deflators, which are a huge success throughout the world. The product range has recently been expanded to include the Massojet Under Body Buddy, and now includes the Staun 329 Corrosion Inhibiting Formula.

This product was developed entirely in Australia for the purpose of preventing vehicle rust and corrosion. Staun Pty. Ltd. also has other 4WD accessories in the pipeline that it is researching and refining in Australia for worldwide distribution.

Staun Pty. Ltd. is worthy of praise, so look for me to keep you up to date about all of its activities and new products.

In the meantime, check Staun out at [www.staunproducts.com](http://www.staunproducts.com) Dealer Inquiries welcome, just email me at [coyote@eco4wd.com](mailto:coyote@eco4wd.com)



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# TRAIL TIP **DEEP VEES**

Chapter 6 (Terrain and Obstacles) of "SHIFTING Into 4WD" offers more discussion on driving techniques for different terrain. See page 38 of the Bonus Issue, or [www.eco4wd.com/book\\_preview/!preview.htm](http://www.eco4wd.com/book_preview/!preview.htm) for a tour.

Mother Nature is ever-present. When She rains, She eventually sends water down or across the road. Sometimes, man cuts deep vees to route the water his way, which Mother Nature will eventually adjust Her way. Natural or otherwise, there are two kinds of deep vees. There are those that run across the road and those that run down the road. You cross them as follows.



Your first choice, as already discussed, is to give up if bad. The next easiest choice for virtually all situations is to go around them, but I'm told that's too easy. The Coyote doesn't believe in "no pain, no gain" as we've all been brainwashed into believing to be politically correct. The ride of life is as easy or as rough as you want to make it. I'll always choose to paddle downstream, first, every time.

## CROSS DIAGONALLY

If a significant dip is across the road, approach slowly and cross it at an angle. By placing one tire at a time into the ditch, you are less likely to drag the frame and benefit by less "coming out" resistance. Place two wheels in the ditch, at the same time, and you literally have to lift the entire 4X up and out at a steep angle. In addition, with head on, the front tires have less traction because they are both gnawing away at the steeper deep vee slope. The diagonal approach typically will go something like left front, right front, then left rear and right rear or vice versa.

You also gain ground clearance with this one-wheel-at-a-time approach. The potential and severity of frame-drag is lessened. When you drop two wheels in at one time, you may find a significant left-to-right portion of the undercarriage drags. One wheel at a time hangs up only a portion of the frame, not all of it at once. Traverse deep vees diagonally. It helps smooth out the gentler ones, too.

Test this diagonal approach technique on parking lot speed bumps. Diagonal all but eliminates their annoying discomfort....

## ...STRADDLE WITH CARE!

You also may find Mother Nature channeling Her vital fluid exactly down the middle of the trail, right where you want to drive. In this case, it's best to drive to one side or the other, but that's not always possible.

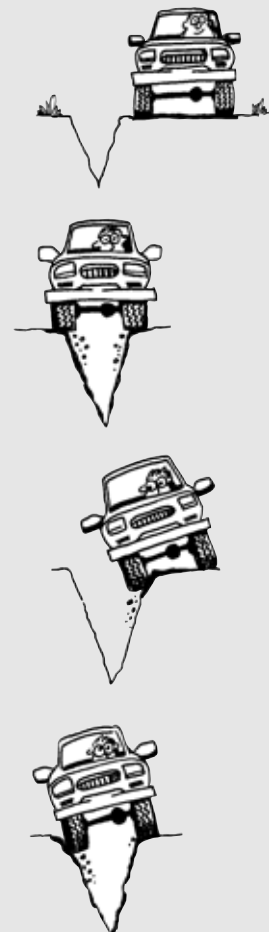
Consider straddling the groove, but pay attention to the *getzonta* and the *gozoffa* sections. Ah, I love these technical terms. Does it get wider and deeper ahead? You may be able to straddle the start only to find just like the pink bunny, the vee just keeps on going and going forever. Before you set out to straddle a deep vee, make sure you know how and where you'll get off.

## DRIVE IN IT

Three "drive in it" alternatives exist. You may use the tire sidewalls, like the tread, to drive one side or the other of the ditch. Here you have to trust that the tread on the high bank will offer enough sideslip resistance to hold you in the desired position. If this full-contact tread is not good, scratch that approach. Actually, in most situations, your sidewalls alone will do much better than you'd ever expect.

The drawings show how you can place the sidewalls on either side of the ditch and I'm never sure what to use. The nearside feels safer and the farside provides more ground clearance. The downside of using the outer sidewall is that it leads to body damage quicker. In contrast, the inside sidewall may cause ground clearance problems sooner than expected.

Driving at the bottom (not shown) may be the ultimate body bender. As you drop deeper into the ditch from either side, the 4WD leans more and may cause body contact. I'd say really crawl up on this alternative.



## Ecological 4 WHEELING ADVENTURES

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ECO4WD is committed to passive appreciation of Mother Nature and ecological backcountry travel on unpaved roads.

The ECO4WD newsletter is published every other month. Subscriptions are \$14 for six issues. January through September features the Coyote's technical articles. The 40-page November-December Bonus Issue is the only issue that contains advertising. Contact ECO4WD for advertising rates or to receive a free Bonus Issue. Bulk copies are also available. For Newsletter Reprints on selected topics and back issue orders, see page 10. Back issues are \$3.00 each.

We encourage the submission of articles and photographs for publication and reserve the right to edit them. Submissions are only returned when accompanied by a stamped, self-addressed envelope.

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## FOURWHEELING ACADEMY

# THE ICE AGE IS OVER™ - PART II

Text and photos by Harry Lewellyn

When I reported on the FridgeFreeze 35 liter model (March-April 2003), owner Jay Black claimed his redesigned units would have better cooldown times. This article reports on his 20-liter unit. Thank you Bill Wilkinson for the test unit loan.

### DESCRIPTION

FridgeFreezes are multi-voltage (operate on 12 and 24 VDC, and 110 VAC) refrigerator/freezer units. The 110 VAC capability means they can be pre-cooled at home by household current and moved to the hotel room to save your battery for field duty.

First glance reveals a well-engineered, quality manufactured product line. The various size units range from 20 to 60 liters and are of the same basic design. Marine quality aluminum (most anodized), along with stainless steel, brass and ABS plastic are used throughout. Electrical switches, plugs and the compressor-ON LED also reflect marine-environment thinking. The hinge is stainless steel and the latch is a work of art, not to mention a beefy lid seal. Solid aluminum handles are built for years of service. They are rated at 1,000 pounds. You just get a feeling of quality the minute you lay eyes on these units.

### POWER SAVING FEATURE

The biggest innovation is the (power saver) condenser – the part that gets rid of the heat taken out of the cold storage area. FridgeFreeze uses most of the outer case for this, thus eliminating the need for a cooling fan blowing over a buried, conventional, radiator-looking thingy. However, this design has a serious drawback (see SURROUNDED below).

To bring this saving into perspective, the typical cooling fan draws from 0.150 to 0.450 amps. This equates to about 4 to 8% more power drain than the “case” condens-



*Figure 1 20 liter FridgeFreeze with circulation, spacer boards added by Bill Wilkinson.*

er approach used by FridgeFreeze.

FridgeFreeze also uses two to three inches of polyurethane foam insulation in contrast to one to one and one-half inches in most competing brands. After the tests were completed, I was impressed with how long the unit held cold without ice.

### FUNCTIONAL FEATURES

The control panel is well laid out (see Figure 1) with only one (personal preference) drawback. I'd like to see the power cable connections (both AC and DC) come out on the bottom instead of near the top, but Jay says that has its drawbacks, too.

Otherwise, everything is right where you need it, including the temperature gauge, fuses, thermostat and the compressor-ON LED.

The inside is well thought out, too. The entire interior is one smooth welded/sealed unit simplifying cleaning. Cooling takes place on the sides, plus the bottom, where it has a higher concentration of cooling coils. By placing a thermal barrier (supplied in larger units) over your frozen goods, the bottom may serve as a freezer and above as your refrigerator.

See ICE AGE/p4

They also come with a double-A flashlight and holder on the inside of the lid. If nothing else, the batteries will last forever stored in the cold. I liked how quietly it ran, too.

As with many other commercially available units, FridgeFreeze uses a Danfoss compressor. Danfoss couples a sealed, brushless DC motor with an exotic electronic temperature-compensated motor control system that also contributes to low power drain.

### TEST RESULTS

Figure 2 compares the 20-liter FridgeFreeze cooldown time with all of the

other units tested over the past three years. Depending on your flair, both a graph and bar chart present the same information. "Cool" was arbitrarily defined as when a "control" six-pack in the center/bottom of the cold storage area reached 43° F. As you can see, the 20-liter FridgeFreeze is second only to the Minus 40, but pack it tightly (surround it with other gear) and it suffers!

### SURROUNDED

This aspect is subtle, but very important! It does not have to do with how cold the unit eventually gets, but it does have to do with how fast it cools down and how

much power is consumed to maintain cool.

I ran three different tests: One with the unit completely in free air (totally open); another simulating a tightly packed situation (no free air space) and the third gave the unit one-inch of free space all the way around as recommended by Jay. However, the instruction in the manual and on the lid specify four-inches. Add four inches of surrounding free air space and the 20-l unit takes up 6.66 versus 2.91 cubic feet. That's 2.29 times as much precious cargo space, and in cramped vehicles (CJs, etc.), that's something to consider. Note in Figure 1 how Bill Wilkinson added spacer boards to ensure one-inch of ventilation.

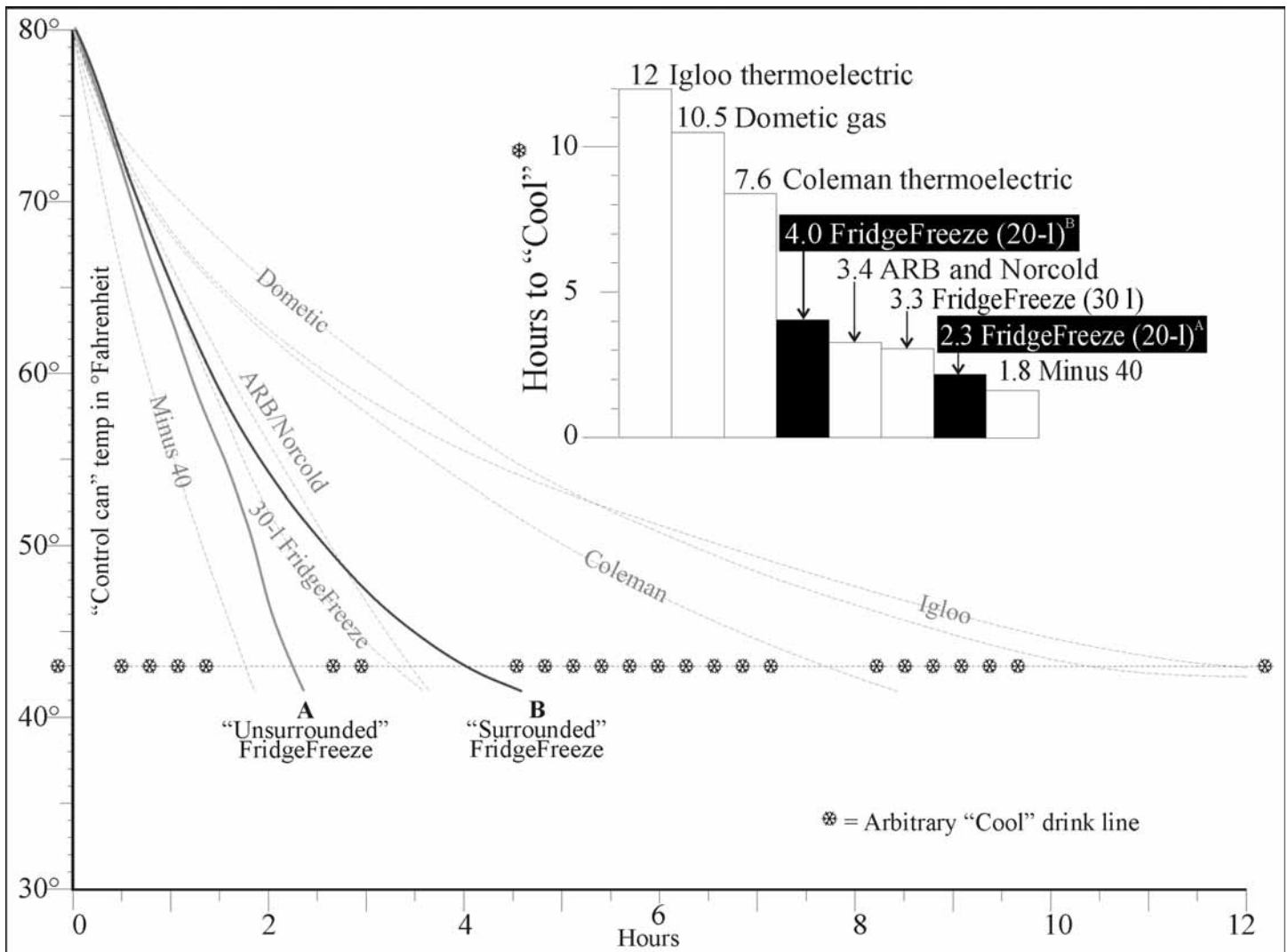


Figure 2 Cooldown time for various refrigerators. Note the time difference between the amount of free air space for the FridgeFreeze. A is with no free air space and B is completely open.

# BOOK REVIEW: *Guide to the Beautiful and Historic Lucerne Valley*

By Harry Lewellyn

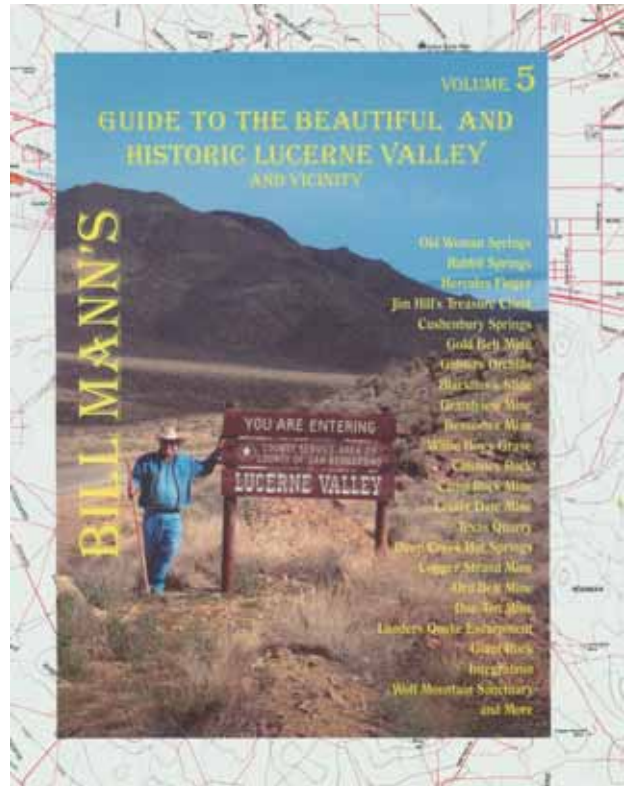
Author Bill Mann has a deep and rich desert track record that dates back more than 50 years. This has led to four other wonderfully informative guidebooks about his home turf. Lucerne Valley is one of my favorite areas where I lead tours and conduct several classes. I learned a few new secrets and additional local information from his newest book, *Guide to the Beautiful and Historic Lucerne Valley*. This is Volume 5 in his series, and he's slightly changed his style.

Having been a San Bernardino County Museum Commissioner for 12 years, and a charter member of The Mojave River Valley Museum where he served as president for two terms and board member for many more, he definitely knows the area. As a result, he has access to historic photographs (many throughout the book) and information that he generously shares in all 5 volumes, particularly this one. His new approach is more pictures, fewer words and a general locator map, a great addition to his format.

As with his other books, each of the 55 sites described in Volume 5 offers "Scouting Tips." Here, he provides a DeLorme Atlas & Gazetteer page and coordinate reference, GPS coordinates, and makes vehicle recommendations. The latter varies from "2WD" to "Extreme 4WD."

Regarding finding the sites, he states, "If you can't find them, I guarantee you will have a good time looking for them." I agree!

We now offer *Guide to the Beautiful and Historic Lucerne Valley*, by Bill Mann (107 pages, 8½" X 11" format, full color) in this newsletter and on our Web site.



Surrounded, the 20-1 unit consumed 2.76 times as much power and took 1.74 times longer to cool down than totally open! With one inch of air circulation space, the unit still consumed 1.3 times as much power and took 1.5 times longer to cool down. With all other conventional condenser (cooling fan) units tested, surrounding the unit adds insulation and actually decreases power consumption and cooldown time, provided you leave the area above the condenser free. This is natural to do since access for all units, regardless of design, is at the top.

Since the FridgeFreeze 20-1 case functions as the "heat-dissipation" con-

denser, leave plenty of surrounding (free) air space or you'll pay the price of increased cooldown time and total power consumption while maintaining your desired temperature.

## **SUMMARY**

FridgeFreeze is a well-designed and manufactured portable refrigerator, but you must pay attention to free air space when packing.

## **CONTACT INFORMATION**

FridgeFreeze is located at 5343 Banks St., San Diego, CA 92110 or telephone

(619) 220-6003. [www.FridgeFreeze.com](http://www.FridgeFreeze.com) gets you to the FridgeFreeze Web site.

## **REFRIGERATOR REPRINT**

Send \$3.00 for our special refrigerator/ice chest reprint that completely describes the test methods and results. It also offers some hints on doubling ice life in all ice chests.



# BOOK REVIEW:

## *Mitchell's Books Mature*

By Roger Vargo

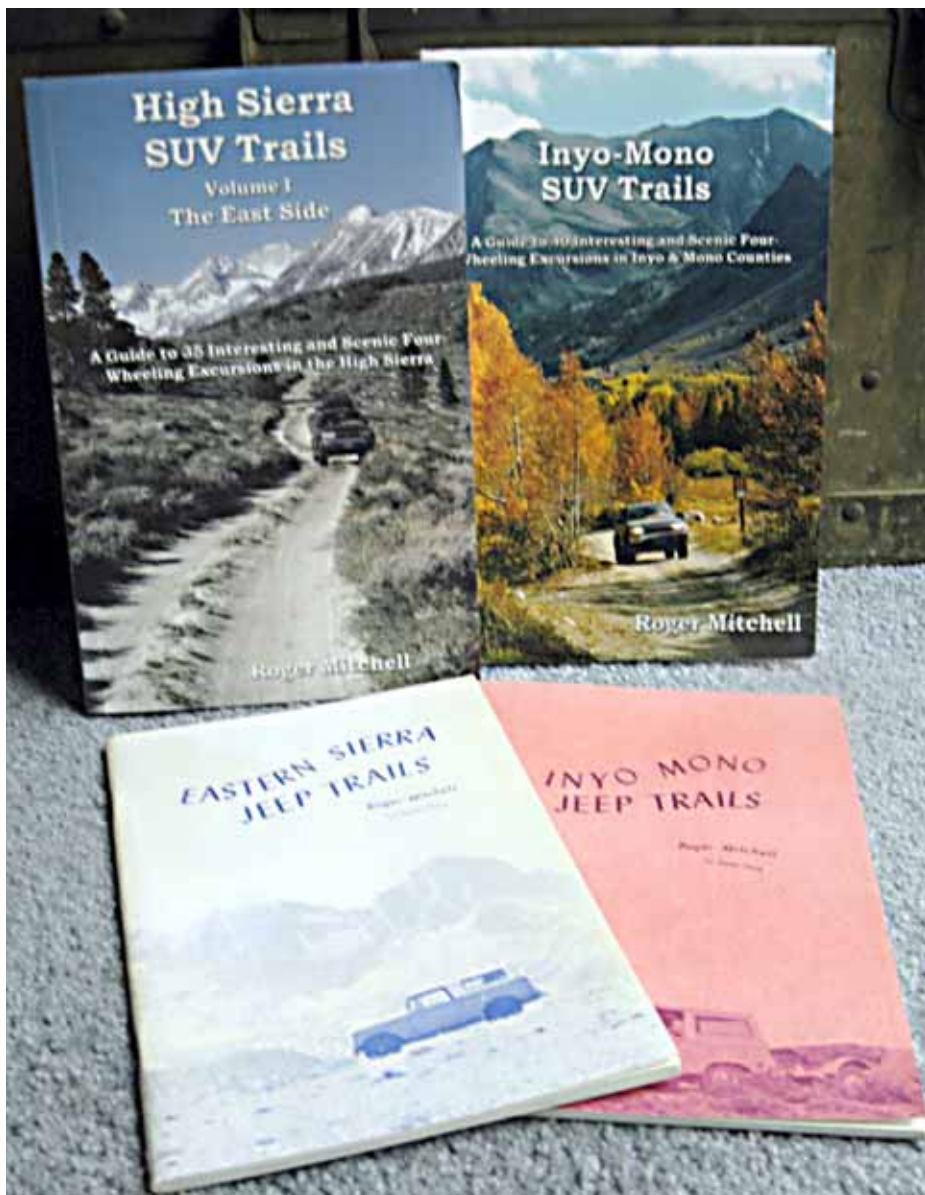
I've been a fan of Roger Mitchell since his days with the late Walt Wheelock's La Siesta Press. Our Monache Meanderings trip is based partly on his "Monache Country" trip in Eastern Sierra Jeep Trails (1970/1983) and the Fat Hill Fandango trip has its roots in Inyo Mono Jeep Trails (1969/1987). These booklets retailed for less than the price of a cup of yuppie coffee today.

Back in the old days, backcountry drivers were usually called "Jeepers" because the vehicle of choice was the Jeep CJ. The sport utility vehicles (SUV) that many of us drive today had yet to be invented, although Mitchell drove an International Scout, an ancestor to the modern SUV.

Jump ahead 30 some years. Roger Mitchell is still out there, but now he's driving a Toyota 4Runner. Backcountry dirt roads are more frequently called SUV trails and the price of a trail book is back in line with the 10:1 ratio for a cup of Starbucks.

High Sierra SUV Trails Vol I lists 35 routes starting from Reno in the north to Lone Pine in the south. His original Eastern Sierra Jeep Trails had ten routes from Markleeville to Kennedy Meadows. I've always felt that backcountry travel is a lot more fun when it is integrated with history. Trip #19, "Searching for Fremont's Lost Cannon", is "A needle in a haystack search for a cannon abandoned in 1844 by Lt. John C. Fremont's Second Expedition west to California." While most trips listed in the book have an estimated time period from a few hours to a day, this trip can "take but a few hours or a lifetime, depending on what you are willing to give."

Trip #21, "Munckton Memories", is a more conventional outing. Our September Golden Leaves and Golden Trails trip follows the same basic route. The route starts off Highway 395 south of Bridgeport, near Green Creek. Mitchell reminds readers that authors such as Remi Nadeau and Ella Cain fail to mention the obscure gold mining town of Munckton, locat-



ed in the mountains of the Castle Peak Mining District. The short-lived town was named after Dr. George Munckton, a Carson City druggist who had achieved a degree of wealth from mining interests in Aurora, Nevada. The major mine was the Dunderberg Mine, which operated off and on through several owners until 1903.

Directions on this trip mesh with the actual conditions we found traveling the route for several years. His history also agrees with what little is available in other publications. Two historical points, however, that are not mentioned are that the starting point for the trip, near the site of the old Mono County Poor Farm and the Dynamo Pond, from which Bodie was the first city to generate long distance hydroelectric power, is a short distance from the main route over an easy dirt road.

Inyo-Mono SUV Trails describes 40 routes from Bridgeport to Olancho. The old Inyo Mono Jeep Trails had 18 trails. There is some overlap in the coverage area of both books. The search for Fremont's lost cannon is described in this book, too. Missing in both books is any reference to travel to Monache Meadows.

I'm more familiar with some of the routes in this volume than I am with most of those described in High Sierra SUV Trails. Trip #9, "On Track with the Bodie & Benton Railway, Part 2", is part of our By God, to Bodie trip, although we travel in the opposite direction from Mono Mills to Highway 167. Mitchell's route description is current, including references to the 2001 Crater Fire, which came close to consuming what is left of Mono Mills.

Unfortunately, the same cannot be said for Trip #37, "The Crest of the Inyos". This outing describes a route from Keeler, up the Yellow Grade Road to Cerro Gordo and on to the Salt Tram and Burgess Mine. A related trip (#36, "The Swansea Grade") describes the route from Swansea to the Burgess Mine, the Salt Tram, Cerro Gordo and

down the Yellow Grade.

Mitchell's historical and geological interpretations are generally accurate, but some of his information about Cerro Gordo is seriously flawed. For instance, Mitchell writes on page 241, "On a large tailings dump overlooking the town are the metal clad buildings of Belshaw's smelter, with its efficient reverberatory furnace." The metal clad buildings are actually the Union Mine hoist works and miners' changing room. Both of which are not usually open to visitors. Nothing remains of Belshaw's smelter.

Also incorrect is the statement that overnight accommodations are available at the American Hotel. Accommodations are available (as stated) in Belshaw's house or the Bunk House. Jody Stewart died in December, 2001. Her husband, Mike Patterson now owns Cerro Gordo. The town is managed by John and Roxie Bowden. Prospective visitors should phone (760-876-1860) for information and reservations.

Disturbing too, is the misinformation presented on the Salt Tram tender's house. Mitchell writes (page 244), "...Unfortunately the same cannot be said of the house occupied by the tram tender. In 1967 the roof was still intact and somewhat functioning. Today the heavy snows of the last thirty years have caved in the roof and collapsed the deck." I don't know when Mitchell last visited this site prior to writing this description. The tram tender's house was under restoration in 2001 and is nearly totally restored as an adopt-a-cabin today.

I'd like to see some enhancements in Mitchell's future volumes. The maps shown in either book are photographs or scans taken mainly from topographic or Forest Service maps. These, in most cases, are too small to be easily readable. Mitchell needs to provide full-page maps that are crisp and readable. Easy to find references to standard printed maps should also be provided.

Another way to achieve cartographic compliance would be to provide high-resolution maps via the Web.

Mitchell should also provide a reference as to when a site or route was last field checked. Authors such as Philip Varney (Southern California's Best Ghost Towns) have incorporated a field check date make it easier for readers to evaluate the contemporary accuracy of site information.

In spite of some shortcomings, I found Roger Mitchell's High Sierra SUV Trails Vol I and Inyo-Mono SUV Trails interesting and useful resources for trip planning. Both volumes contain assorted checklists for safety and survival equipment as well as a logical way (the Mitchell Scale) of describing route difficulty. Mitchell also provides a basic primer of mining and geologic terms that travelers will find useful to help decode the arcane vocabulary of hard rock miners so often quoted in the literature.

Mitchell's books, like any other guides, are only one step in the trip planning process. Prospective travelers should check and cross-reference their intended routes of travel. Bibliographies in both books offer additional details. Don't forget seasonal considerations (as mentioned in the books). Many of the routes described will be impassable, unsafe or unreasonably difficult during the winter and early spring.

High Sierra SUV Trails Volume I, The East Side (2002)

(ISBN 0-9707115-1-4)

Inyo-Mono SUV Trails (2003)

(ISBN 0-9707115-3-0)


both by Roger Mitchell

Track & Trail Publications, Oakhurst, CA



# COMING EVENTS

<b>EVENT</b>	<b>DATE</b>	<b>DETAILS - See note below</b>
Death Valley I (H)	January 23 to 26	4WD mini vacation from Furnace Creek Ranch /p23
Pinyon Mountain (C)	February 14 to 15	Anza-Borrego, CA camping roughie—skills trip /p23
Truckhaven (C)	February 28 to 29	Anza-Borrego, CA camping roughie—skills trip /p24
Baja Whales & Rock Art (H)	March 5 to 11	Great intro to Baja, Mexico—open to all vehicles! /p25
Lunch in Lucerne	March 20	Easy exploring trip in CA's high desert near Victorville/p24
Borrego Boondoggle II (C)	March 26 to 28	Three good days of CA badlands adventure /p25
Lucerne Sand Session (C)	April 3 to 4	Sand driving skills session in CA high desert/p26
Mojave Expedition	April 10 (Sat.)	Explore mountains and valleys of the Western Mojave /p26
Bonus Trip with Roger Vargo	April 11 (Sun.)	TBA: Ridgecrest/Mojave/Jawbone area /p26
Copper Canyon, Mexico (H)	April 16 to 27	A driving vacation through Mexico's backcountry /p27
<i>Moose Anderson Days</i>	<i>April 24 to 25</i>	<i>Annual clean-up and fun at BLM Jawbone Station, CA /p18</i>
<i>Discovering 4WD *</i>	<i>May 8 (approx.)</i>	<i>Through Rancho Santiago College; 4WD basics (6 hr lect.)</i>
San Felipe Sand Blast (H)	May 14 to 17	Beach run plus local excursions /p27
<i>Arrowhead Brunch Adventure *</i>	<i>May 23 (approx.)</i>	<i>Through Rancho Santiago College (desc. on p28); no lect.</i>
Piute Passage (C)	June 5 to 6	Historic California tour /p28
Arrowhead Adventure	June 6	Easy back way into CA's San Bernardino mountains /p28
Hot Spring Mountain (C)	June 19 to 20	Two skills-improving days at Los Coyotes /p29
Land of Volcanoes (C or H)	June 19 to 21	Geologic California tour /p29
Fat Hill Fandango (H)	July 17 to 19	Historic California/Ghost town tour /p30
Monache Meandering (C)	August 14 to 16	Historic California tour /p31
Rubicon Rendezvous (C)	August 19 to 22	Camping roughie in Tahoe, CA /p30
Arrowhead Adventure	September 5	Easy back way into CA's San Bernardino mountains /p28
By God, to Bodie! (C or H)	September 11 to 13	Historic California ghost town tour /p31
Golden Leaves & Trails (C or H)	September 18 to 20	Historic California tour /p32
Introducing the Hammers (C)	October 8 to 9	Extreme black diamond in Johnson Valley, CA /p33
Death Valley II (C)	October 15 to 18	4WD camping mini-vacation /p32
Lunch in Lucerne	October 30	Easy exploring trip in CA's high desert near Victorville/p24
Copper Canyon, Mexico (H)	November 12 to 23	A driving vacation through Mexico's backcountry /p27

(C) = Camping trip    (H) = Hotel-based trip     = Schedule subject to change    \* = R. S. College (714) 480-7390

**DETAILS:** The page references (above) refer to the 2004 Bonus Issue newsletter. Request a FREE copy by: mailing your USPS address (USA only); emailing your address with "newsletter" in the subject, or downloading it for FREE from our Web site ([www.eco4wd.com/products!/newsletter\\_choice.htm](http://www.eco4wd.com/products!/newsletter_choice.htm)). See Trip Policy in the newsletter or [www.eco4wd.com/about\\_us/policy.htm](http://www.eco4wd.com/about_us/policy.htm) for registration details.

## e-commerce HITS eco4wd.com!



It's been a long time coming, but it's finally here — the eco4wd.com e-commerce store is up and running! You may now order any of our products or services from our site.

To make shopping easy, you immediately choose a category: CLASSES, TOURS, HARDWARE, BOOKS, NEWSLETTER or REPRINTS ([www.eco4wd.com/products!/product\\_choice.htm](http://www.eco4wd.com/products!/product_choice.htm)). This means you don't have to weed through HARDWARE, for example, to book the TOUR you want. Each product is backed up with enough detail to help you make informed purchasing decisions. And if you choose, you may still order by

mail. Simply print the order form ([www.eco4wd.com/products!/order\\_form.htm](http://www.eco4wd.com/products!/order_form.htm)).

Further, we've made all of the tour registration forms downloadable, and you may preview our Trip Policy ([www.eco4wd.com/about\\_us/policy.htm](http://www.eco4wd.com/about_us/policy.htm)) on the site.

Look for new items to be added as we find other 4WD-related products that pass Coyote approval.

Also remember that you may download any newsletter, FREE, since the September-October 2002 issue.



## SAFETY SEAL

**NO RUBBER  
CEMENT!**



The Safety Seal tire plugger kit is easy to use and makes a permanent repair!

Road heat completely vulcanizes the 21-ply plugs to the inner-tire butyl rubber through a U.S. patented repair process. Make a repair once with Safety Seal, and it will conform to the shape of the puncture and outlast the tire.

**PLUG TIRES IN MINUTES~ON OR OFF  
THE CAR~WITH LITTLE EFFORT!**

**TruckAir  
can't be matched  
for the price!**

**TRUCKAIR**  
12V HEAVY DUTY INFLATOR



- Built-in 2-1/4" diameter, 300-psi gauge
  - 25" delivery hose with nozzle adapters
  - Fan-cooled, heavy-duty motor runs nonstop for 8 hours
  - Long, 13-1/2' power cord plugs into the cigarette lighter for 12VDC power
  - .47 cubic feet per hour air flow
  - Inflates even the biggest tires in minutes
- This is the most cost effective compressor around! You can pay 300 or 400% more and only reduce air-up time by as little as 30%!**

## NO-LOSS Valve Caps

*No more searching for dropped caps!  
No more storing filthy caps in your mouth!*



Secure the polyethylene restraining straps over any valve stem threads for permanent storage and screw down the brass caps to tighten. Simply unscrew the nickel plated brass caps to inflate/deflate and the straps will hold them safely just a fingertip away.

**Caps hold air with or with a valve core!  
BUILT FOR NATO MILITARY VEHICLES!**

## STAUN PRESETTABLE TYRE DEFLATORS

No backbreaking individual tire deflating!



Staun deflators are the E-A-S-Y way to deflate your tires for increased traction.

Deflators start with as low as 1-2 PSI pressure difference!

Simply screw onto your tire valve stem to automatically deflate to your desired pressure (6-30 PSI).

**Coyote recommendation:** Make these go twice as far by setting two to your preferred sand pressure and two for the rocks!

## MASTER-PULL SUPER YANKER

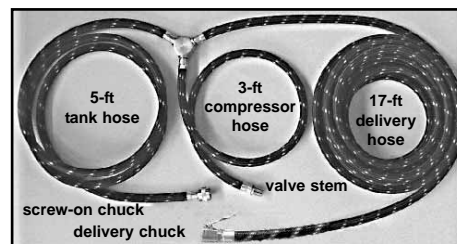
30'-long  
7/8"-diameter  
double braid  
nylon rope



At 28,500# strong, this *Super Yanker* is more knot friendly and stretches 12.3% more than conventional flat, yellow yank straps. It has professionally hand spliced eyes that all but eliminate sewn-in eye failure. Heavy duty nylon chafe guards protect eyes against wear.

**COMES WITH OR WITHOUT VINYL BAG**

## COYOTE AIR ROBBER



**UNLIMITED AIR:** With an AR, you have unlimited air with or without a compressor. **Connect** the screw-on valve stem chuck to any inflated tire and use the custom lock chuck at the other end to air up. **Connect** a compressor to the valve stem at the end of the 3-way manifold, and continuously replenish the source tire while you fill the others.

When your buddy is stuck and you are free, but you can't connect... use the

## COYOTE CHAIN



downed tree blocking your trail.

Attach the **slide hook** (left) directly to the 4X frame or use it as a choker to cinch up on anything, including the

Loop the **grab hook** (right) back and attach to any chain link. Both clevis hooks are easily removable, leading to endless recovery and repair uses.

**Don't travel the backcountry without one!**

Includes 3' of 5/16", heavy duty transport chain and "Recovery" newsletter reprint.

## ClampTite

clampmaking tool

Hundreds of uses around the home, workshop, garage and in the field.

**CLAMP ANYTHING**

**ANY SIZE**

**ANY SHAPE**

**ANYWHERE!**



This tool is a must for any backcountry traveler's "getchaback" box.

**Makes instant clamps from ordinary wire, or even clothes hangers!**

Stop leaky hoses on the spot or fix broken handles, tail pipes, sports equipment, fences and more with this handy tool.

**ORDER THESE  
PRODUCTS ON  
PAGE 10!**

For more information on these and our other backcountry products and services, see:

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The **ECO4WD** newsletter runs the gamut! It presents places to go, driving techniques and theory, new products, the class and tour schedule, and more. *Back issues* (\$3.00 each) and *reprints* bring you up to speed on past matters and selected topics. Use this form to identify which reprints you want to order, then simply attach it to the order blank below. Order specific back issues by making a note on this form.

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