

## Club Information

### Contacting NCRC

Any correspondence should be addressed to:

Northern California Rover Club P.O. Box 14961 Berkeley, CA, 94712-5961

Members are strongly encourage to submit articles, notes or letters for publication.

### Club Decals

Additional club decals are currently available for \$4 each. The decals are approximately 2 inches by 4 inches and bear the club logo as it appears on the newsletter cover. To obtain additional decals please forward a letter with a mailing address, number of decals desired and a check for the appropriate sum to the club address.

### Newsletter Back Issues

Newsletter back issues may be obtained on an as available basis for \$1.50 each. The \$1.50 includes postage.

### Membership Application

A membership application form is located on the rear page of each newsletter. Please feel free to copy this form for anyone you may know who is interested in joining the Northern California Rover Club. Application for membership need not be made using the application form. Membership application should include: Name, Mailing Address (inc. zip code), Telephone Number, Type of Rover owned

### **Officers**

Current club officers are:

President: Bruce Bonar Vice President: Eric Cope Secretary: Jeremy Bartlett Treasurer: Morgan Hannaford Club Jester: Jim Russell

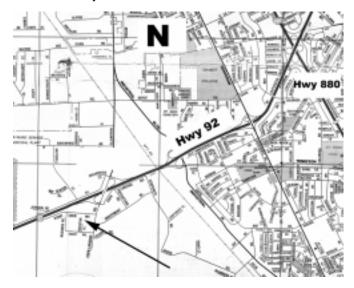
### **Next Meeting**

The next meeting of the Northern California Rover Club will be held at 8:00 p.m. **January 9th**, 1998.

Comtech Wireless
3928 Point Eden Way
Hayward, CA
tel. 1-800-745-9991 ext. 1103 (after 5:00 p.m.)

### **Directions**

From 880 take 92 toward the San Mateo Bridge. Take the Clawiter Road exit. ( **WARNING:** if you miss this exit you will end up on the bridge - its the last exit). At the stop sign turn left, go over the freeway. At the next stop sign go straight. At the first street turn right. This should be Pt. Eden Way. Take the first driveway then left. There are no parking restrictions. Call the 1-800 number after 5 if you are lost. The club will probably adjourn to Buffalo Bill in Hayward.



Cover	1
Club Information	2
Meeting Minutes	3
Club Calendar	3
Sherwood road	4
Elections	5
Freelander Update	5
Technical Information	
Rear Half Shaft Removal	6
Trip Report	
Cow Mountain OHV Area	8
Cisco Grove	12
OHV Involvement	13
Member Innovation	14
Mechanics & Parts	15
NCRC Application	16

### **Cover Photo:**

Mehdi Saghafi descends a steep grade in the Cow Mountain OHV area in his '93 D110 "Tardis"

## Club Meeting Minutes

### October 24, 1997

- The newsletter was briefly discussed and Ben Smith relayed compliments on the production from the Ottawa Valley Land Rover Club (OVLR). The Cisco Grove trip was briefly discussed and agreed to have been enjoyable and worth repeating.
- Jeff Roger provided a set of printed business cards for club member to distribute to other LR owners to publicize the club (Thanks Jeff).
- Bruce Bonar will take the responsibility of publicizing the club and its activities on the internet.
- Mehdi Saghafi mentioned that he has the ability to copy a large number of NCRC member photographs to CD for anyone interested for the cost of the CD (approximately \$3-\$4).



Morgan Hannaford shows proper Land Rover display etiquette with "Darwin" his 69 SIIA 88 at the Palo Alto British Car Meet.

- The criteria for having events be formal NCRC events was discussed and it was decided that an event would have to be approved by the officers to be a formal club event.
- Morgan Hannaford, the treasurer reported that the club had 73 members and fund of \$286.57. Costs for production of T-shirts have already been paid and the shirts are anticipated to be ready next month. The initial T-shirts will be distributed at events and meetings. If they are proven to be popular an additional run and possibly modified design will be produced and advertised in the newsletter.
- The meeting was adjourned and Bruce Bonar and Eric Cope gave an hour lecture and exercise on use GPS and the UTM map coordinate system. The response was very positive and attendants found it very useful. (Thanks to Bruce and Eric)
- CB tuning using SWR meters was discussed as a likely future meeting activity. The group left the meeting site to socialize at Buffalo Bill's in Hayward.
- The next meeting will be held at the same location on January 9<sup>th</sup>, 1998.

### Calendar

The following events may be of interest to club members. If you know of any events or wish to lead fellow club members on a trip please contact one of the club officers or send information to the club PO Box.

**January 4-5, 1998.** NCRC Sherwood Road Mud Run, starts 9:00 am on Satarday in Willits. Contact Jeremy Bartlett (510-540-8630).

January 9, 1998. NCRC Next Club Meeting. 8:00 pm at ComTech Wireless in Hayward (see direction in page2) May 15, 16, 1998. Pacific Northwest Team Challenge, Portland Oregon. Contact Doug Shipman at (503-661-5123)

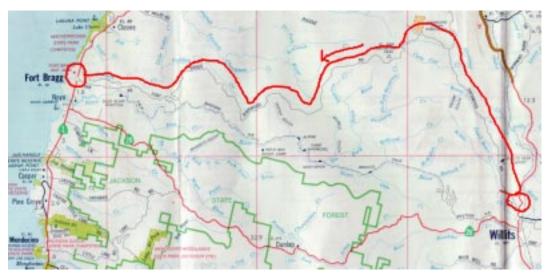
**September, 1998**. Portland Oregon, British Car Meet, Land Rover 50<sup>th</sup> Anniversary events.

**September 1998**. Palo Alto British Car Meet, probably Land Rover 50<sup>th</sup> Anniversary recognition.

**TENTATIVE DATE** ... Mid November 1998... First NCRC Anniversary Rally/50<sup>th</sup> Land Rover Anniversary Rally.

The club will be running a "Mud Run" on January 4 and 5 along the route known as "Sherwood Road" running from Willits to Fort Bragg. The rout is shown in the accompanying map. Maps covering the area include the DeLorme Northern California Atlas and the following USGS 7.5' topographic quadrangles: Longvale Sherwood Peak, Dutchman's Knoll, Burbeck, Northspur, Noyo Hill, Ft. Bragg.

**Monitor CB ch. 7.** We will meet at 9:00 am at the Sun Cycles parking lot in North end of Willits. Be prepared to have to spend a third day on the road if conditions are extremely challenging. Call Jeremy Bartlett (510-540-8630) the week before the trip to confirm and for last minute information and coordination. If you are planning on participating please let me know in case there are last minute changes or cancellations due to extreme weather. Sherwood Rd occasionally closes over winter. This is likely to be a difficult and challenging run with risk of vehicle body damage. Recovery equipment and chainsaws are highly recommended. In addition to the standard club waiver a safety check will be performed on all vehicles participating. The check is described below.



### **Safety Check Requirements**

The following items will be checked at the start of the January Club Mud Run. Please be sure that your vehicle is capable of passing prior to appearing at the event. Failure to pass will mean that you cannot participate or that the run will be canceled. You will also be required to sign a waiver at the start of the event.

- **Brakes:** Your brakes must be firm without pumping with the exception of 109s which are allowed one pump before a firm pedal.
- Emergency Brakes: Your emergency brake must either stall the vehicle or hold the vehicle on a steep slope.
- **Steering:** Your steering must be tight with equal turns of the wheel to each side. No more than a 45 degrees turn of the steering wheel before wheel response will be allowed.
- Front and Rear Recovery Points: Your vehicle must have secure locations at both front and rear for recovery (winching). These points may include secure bumpers and trailer hitches, however, towing balls ARE NOT to be used as recovery points. Rear cross member grab handles and rack ladders are not acceptable recovery points.
- **Hard Top or Roll Cage:** Your vehicle must have either a secure (bolted or built in) hard top or roll cage. Open tops and canvas tops are not acceptable due to the real risk of rollover.
- **Recovery Equipment:** You must have at least one tow strap or recovery strap. *Ideally you will also have other recovery equipment (winches, come-alongs, shackles, pulleys, etc.) that you do not place an undue burden on the recovery equipment of other members since this can lead to equipment failure due to overwork.*

\*\*\*\*\*\*\*\*Winches and other recovery equipment are strongly recommended.\*\*\*\*\*\*\*\*

## North America Freelander Testing? 5 NCRC Scoop

A sharp eyed member of the NCRC snapped this photo of a heavily disguised Freelander undergoing testing in the Northern California area. The identity of the mole is being withheld in hopes she can gather further information. As



the photograph indicates a Metropolitan Nash body has been mounted on camouflaged chassis. It is likely that the unit is serving as a test bed for the CD changer rumored to be under development for the North American debut of the Freelander in approximately 2 years. Consumer complaints of CD units in MkII RRs have indicated that this is a critical area for successful market penetration. Few automobile CD units have display units that allow SUV drivers to see the display selection without diverting attention from the road. Our mole reported a possible HUD (heads up display) unit on the passenger side of the vehicle with exposed wiring hanging from the dash area, probably a prototype allowing passenger adjustment and diagnosis during testing.

# **NCRC WANTS YOU**

Elections for club officers will be coming up in April of 1998 so start thinking if you'd like to run for one of the officer positions.

Voting will be by mail ballot with ballots sent out in March, so final candidate lists will be required by the end of February. If you have a particular set of ideas you'd like to see implemented or direction you'd like to see the club head in please consider running and prepare a statement for other club members so they know what you've got in mind. All officer positions will be open for election; these include: President, Vice President, Treasurer, Secretary, and Club Jester ("5th wheel"). The current officers strongly encourage you to participate and take their place (we're a lazy lot and want to leave the work to others!). Any member is entitled to run for any position but may only hold one position at any time. Members can announce their candidacy at the next two meetings or by mail to the club PO Box.





## 1<sup>st</sup> /50<sup>th</sup> Anniversary

As you are probably aware, appropriately enough the 50th anniversary of Land Rover and , the 1st anniversary of the NCRC are coming up in April of 1998. While the 1st anniversary of the NCRC is not exactly earth shaking news, we're looking for ideas appropriate for celebration of the 50th anniversary of Land Rover. If you have an idea please let us know and we'll try to act on it.



## Technical Information



### Rear Half Shaft Removal

### By: Jeremy Bartlett

Anyone who's owned a Series Land-Rover long enough has heard it... even owners of more modern Land Rovers have heard it... the "bang" that varies from a loud crack to a sound not unlike a shotgun, that reveals a rear half shaft has broken in use. In Series vehicles in 2WD, this is followed by an immediate lack of forward progress. Half shaft failure is frequent enough that there is a school of thought that Series rear half shafts ("axles") should be replaced periodically as an act of preventative maintenance. The frequency of half shaft failure has also given rise to the myth that the rear half shaft was designed as a "mechanical fuse" to protect the other drive line components.

So how do you go about removing rear axles even if they've not broken? You may even want to remove the rear half shafts for other reasons such as removal/reinstallation of the rear differential or replacing leaking seals (in a Land Rover?? J). The operation itself is very straightforward especially if the axles have not been broken. Unfortunately if the half shaft breaks it tends to break at the differential end where a small stubby piece of half shaft often lodges in the carrier making removal difficult. I'll only be covering intact removal here since the complications of removing broken pieces depends on the particular details of the situation and ingenuity.

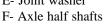
The basic components of the rear drive (taken from a Series Land Rover) are shown in photograph 1 and include the differential, the half shaft and the driving member or

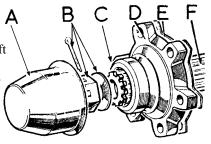


flange. Assorted seals are included but these are the basics. Photograph 2, a drawing from the shop manual, shows the details of the Series parts at the drive flange. The NA

Defender axles are simpler, since the half shaft and drive member are combined in one piece.

A-Hub cap
B-Fixingsdriving
member to axle shaft
C-Oil seal
D- Driving member
E- Joint washer





#### **Tools**

Removing half shafts is a very simple operation and the tools needed are minimal. The tools vary slightly (basically metric vs. English) depending on whether you're removing a Series or coil sprung (or air sprung in the case of recent Range Rovers) half shaft. They include:

A 17mm socket and ratchet (coil sprung) or 3/8 BSF socket (Series) (you can get by with spanners it just takes longer .. for those few of you with on-board air this is a snap).

A 5/8BSF socket (Series only).

1/2 " square drive breaker bar or ratchet

hammer

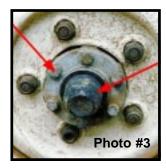
pry bar

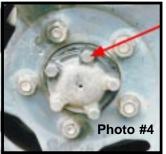
rags

gasket sealer

In addition, for series vehicles, you should have on hand for replacement:

felt oil seal for drive member to half shaft seal split pin/cotter pin





For Series vehicles, remove the hub cap (photograph 3) by knocking or prying it off. This will reveal the castle nut retaining the axle to the drive member or flange. If you're going to remove the shaft and cap the axle housing with the flange, pry out the cotter pin and using the 5/8 socket undo the castle nut. You will need to have the wheel braced for this. In the case of the NA Defenders the rear half shaft is one piece with the drive flange and there is no hub cover to be removed (photograph 4). This design makes for a more powerful unit but can be inconvenient if you need to pull a broken shaft but have nothing to seal the hub with. It might be advisable to carry a European spec or front drive flange if you're worried about shaft failure. These caps and flanges fit the rear.

Next unbolt the bolts that hold the drive flange to the hub (the part to which the wheel bolts). On the Series vehicles these are 3/8" BSF (photograph 3). On the coil

## Technical Information



### Rear Half Shaft Removal



sprung vehicles, these are 17mm bolt heads (photograph 4).

After removing the bolts remove the drive flange/member. It should move easily by hand and slide out. If a sealer was used to set the gasket you may have to tap the drive flange with a hammer to rotate it and break the seal (photograph 5). It may even be necessary to pry the drive flange away from the



hub to start the shaft removal. Photograph 6 shows removal of an improperly installed (it was sealed) drive flange/axle.

As soon as the seal is broken the shaft should readily slide out of the hub and axle casing (photographs 7 and 8). Be prepared with rags to deal with 90 wt that will leak from the axle casing at this point (in Series vehicles).

For broken axles these steps are rarely more complicated; the more complicated issue is removing the stubs that typically stick







in the differential. This may require removing both axles and pushing the remnants of the axle on from the other side. Removing the differential is otherwise relatively straight forward and merely involves unbolting the rear of the propellor shaft from the pinion and unbolting the differential carrier from the axle casing. Details of this process will be covered in an upcoming article on differentials

When the axle removal is complete on Series vehicles cap the axle casing with the drive member and hub cover. Otherwise replace the axle after replacing all seals

and gaskets (Photograph 9). When replacing the drive flange use the paper gasket and no sealer. Apply a small amount of medium strength (blue) thread locker to the bolt threads. There should be no leakage of 90 weight oil from the hub. Leakage indicates a failed hub/axle seal. The hub should be removed and the seal replaced if this is the case.

**END** 

## Trip Report

### Exploring the Cow Mountain OHV Area

### By: Granville Pool

[Ed. Note - This is a description of an OHV area relatively near to the Bay Area that offers much greater expanse and variety than Hollister hills and makes for a relatively easy and enjoyable day out off roading]

#### **Directions**

The staging area is right at the western edge of the 23,000acre BLM South Cow Mountain OHV Recreation Area. Most comers, therefore, would enter from the Ukiah direction, from Highway 101. To get there, take the Talmage Road exit at the south end of Ukiah, proceed east on Talmage Road until it dead-ends into East Side Road, turn right and head south about a third of a mile to Mill Creek Road (which also dead-ends into East Side Road), turn left and head east some 5.5 miles (the last couple unpaved) until you reach the staging area (can't miss it). By this point you are in Lake County. Be sure to stop at the staging area on your way in, to pick up one of the free and invaluable trail maps that are there in a little box. There's an outhouse there, but no water. Be sure to bring drinking water with you! There is no fee for using this OHV park. There are several campgrounds scattered around the area. I don't think there's a fee for those. either.



### **Participants**

Most readers are familiar with the off road outings that arise from discussions on the Land Rover internet mailing lists. As usual with "non-events" discussed on the mendo\_recce list, a mutually -agreed upon a time to meet at Cow Mountain was set at 10:00 AM on a Sunday morning. A wide variety of vehicles and owners usually appear at such events and on this day the participants included:

Chris Dow
Leslie (Mad Scientist) Dow
John White
Walt Swain
Gerry Mugele & Bill Orth
Ben Mitchell
Bill and Chew McDow (briefly)
Dick Hamilton
Granville (Granny) Pool
other attending vehicles included
Dave (DrD) DeHaven

Melanie Pool (Cameo appearance)

Pastel Green '65 IIA 88 SW (Rosencrantz)

Epsom Green '96 Discovery SD

Epsom Green '95 Discovery SG

Eastnor Green '88 Range Rover (Lady Jane)

Conniston Green '95 D90SW (Peat)

Alpine White '94 D90 Ragtop SG

Silver '87 Range Rover

Poppy Red '69 Series II 88

Marine Blue '73 Series III 88 (the Snark)

Dark Green '97 Dodge Ram Pickup (Ramzilla) Dodge Dakota pickup (the Toad)

Dick and I were convoying, along with my wife Melanie, from Redwood Valley. We passed the McDows just after we'd turned onto Mill Creek Road. I couldn't figure why they were headed the other way! Not long after our three vehicles reached the staging area, the McDows showed up. They had been at the staging area so early that they thought they'd gotten the wrong day! They live near Lakeport so had come in from the Lakeport direction (take Scotts Creek Road). Seemingly finding themselves on a solo outing, they drove on over toward Ukiah until they saw us.

## Trip Report

### Exploring the Cow Mountain OHV Area

#### Recce

Blair Peterson and John Kieckhefer had wanted to join us but had other obligations that Sunday. They instead played hooky in the middle of the week and recced the possibilities for us. Blair had just gotten his Defender 110 and just \*had\* to try it out! Blair had posted on the mendo\_recce list the story of his outing. Since it sounded like a good run and was pretty much what I'd had in mind anyway, I suggested that we basically followed his Route.

#### **Trail 11 and 13**

We had to drive some miles on the boring main road (called "Mendo-Lake Road" on the map), past Red Mountain (which is what the locals call this whole area) before we got to the fun part. We left the main road on the hard-to-spot Trail 11D, which is not identified as such

on the trail map but has a trail marker on the ground. This is a short but fairly steep climb with some impressive water bars which are good for high-centering the vehicles with smaller tires and/or longer wheelbases. The McDows, who had just come up to meet folks, left us to head home before we got on that trail. I don't think anyone had any particular trouble with this trail until Leslie (the Mad Scientist of home brew fame), who was in the rear with Walker the Small Kid and Dart the Dog. Chris was just in front of her in with Thelen the Somewhat Bigger Kid. Leslie stopped mid-climb because she could not get diff-lock in her Disco to work. Chris came to the rescue but also could not get it to work. A call on his CB brought Walt to work his magic of laying on of hands that only a seasoned plushydriver could master. He would be handy again later!

Disappointingly, the ground was showing little evidence of the impressive rain of a few days before. Still, there was a sizable mud hole at the top of this trail, just before it joined Trail 11. I've been there when this mud hole could about swallow a Land-Rover. When Blair and John did it earlier in the week, this puddle was dry. Thanks to the spot of rain, we got to enjoy a modicum of mud. To my amazement, some Lazy-Buggers actually went around it! From the mud hole, we went left on Trail 11 and took that to a right turn onto Trail 13. (You can also take the non-challenging Trail 13 directly from Mendo-Lake Road.)

This took us to Rickabaugh Glades, a section of private



Gerry Mugele in "Peat" climbs out of the Benmore Creek Crossing

land through which the trail passes. Don't mess around here, as local yahoos like to do. There was even a cop hiding at the far end to catch anyone who might try it. We stopped for a minute here, to make sure everyone took the correct trail out of the Glades as there are two choices besides the way we came in. We went south on trail 18 which leads to a high ridge. Here there are fantastic views of Clear Lake and the Sanel Valley (Hopland). Leaving the ridge, there's a sharp left turn (at the intersection of Trail 19—ask me about Trail 19!) to a very steep decline. It was so steep, in fact, that Chris called ahead to tell us he had to get out and put more oil in the IIA, as the gauge read 10 PSI, the light was on and the rods were knocking (good idea to check your oil at the staging area, as Chris will not likely forget).

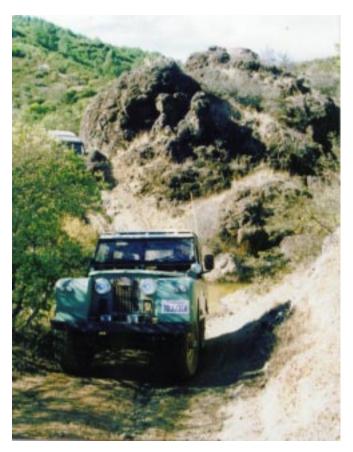
#### **Desperately Seeking Trail 20**

This steep switch back descent leads to a creek crossing (which we found dry) and rocky/rutted climb to trail 20. According to the map, we'd hit no intersections before we got to Trail 20 and then would take a right there. In the lead, I naturally took the first right. It was wrong, and became a long dead-end on a down sloping ridge. Cow Mountain is full of dead-end trails, many not marked. I got to enjoy a good round of ribbing over this goof (and a few others I made as the day went on). I could not respond with any quips of my own but only listen as my CB, when I engaged the mike, only transmitted a horn honk. Frustrating but fun. Fortunately at this particular dead end, there was a loop just big enough for us all to turn around. There was a gully just before the loop, where

# Trip Report Exploring the Cow Mountain OHV Area

Chris says the Mad Scientist got one rear wheel of the disco WAY off the ground while traversing it. On the way out from that loop, Dick Hamilton had a nasty bit of trouble traversing the same gully, and Ben and Gerry (!) got out to help. Dick tried to back up for a new line, scaring the ice cream duo out of their wits (he panicked?), then went right over it.

We hit the real Trail 20 which was properly marked on the ground. We shortly came to another right, this one headed uphill and obviously marked "dead end." The next right should have been the trail that dead-ends at Buckthorn Camp where we wanted to eat lunch. Wrong Again! I started up the trail, finding the brush



Chris Dow in his 65 SIIA explores a Cow Mountain trail.

closing in very badly. So I stopped and told the others to let me check it out. You've heard of brush striping? This would be brush gouging and, as a souvenir, I got a trashed sidewall one of my old, beloved Norseman tires. Of course I got another constant stream of character assassinations to which I could only respond with silence (or rumor has it CB honking - ed.). Meanwhile, others found the proper path to Buckthorn Camp. There, we did indeed enjoy a pleasant, leisurely, Lazy-Bugger lunch, conversation, and Gerry's albums of photos from his trip to the far north the month before.

#### Wandering to Benmore Creek

Eventually we got tired of resting and continued on 20 towards Fourmile Glade, looking for what the map appeared to show as Trail 23. Ben was in the lead now, minus a map, only knowing that we were looking for 23. He passed the turnoff marked Trail 25 but kept going. We found ourselves at Fourmile Glade and Scotts Creek Road (Mendo-Lake Road). Obviously, we'd gone too far. After another wrong turn (guess who?), we found

Trail 25 which is, in fact, the beginning of the Boundary Ridge Trail. This begins with another dry creek bed then descends a series of switchbacks into Benmore Creek.

Before we reached the creek, however, there was vet another dead-end to enjoy (I swear I was not leading then!). If we'd paid closer attention to Blair's description, we'd have avoided it. He said: "If memory serves, at one point you need to veer left through an opening in a post and cable fence to avoid a dead end." Eventually-in spite of our efforts-we found ourselves Benmore Creek. As Blair said: "This spot and the other creek crossings would be a lot more fun in winter (if the Rec. Area is open)." Agreed! It will be open in winter, folks, except when

it's extremely wet or covered with snow (to avoid excessive trail damage).

### Trail 25

There was still enough water in the creek to necessitate my finding a trail of rocks to cross for shooting photos of those trying to climb the oh-so steep exit trail. This ascent was complicated by some mostly defunct concrete lattice erosion control blocks (watch out for exposed rebar!). Trail 25 would now test our grit. One look was enough to aggravate Dick's heart condition. After watching the show the rest of us put on, he headed for home. This ascent climbs some 1200 feet before it meets the shorter alternate route, Trail 23 (the Benmore Loop).

Until Chris attempted this climb, it gave no one trouble crossing the creek or climbing the steep slope on the other side. Chris, however, had a parcel of trouble. As the Snark (SIII 88) and I ascended, we soon were forced to stop behind a line of Rovers parked in the middle of a

## Trip Report

### Exploring the Cow Mountain OHV Area

very steep slope. Why? What was the big hold-up here? Why was Chris not coming up behind me? Chris tells us: "After several failed attempts, I whined in to the CB that I needed a spotter." Spotter? John White, parked just ahead of me, wondered how anyone could need a spotter for this climb. Even so, he slid down the trail to see if he could help. By the time John got there, Walt was once again on the job. John returned and we moved up the trail to a nearly level spot near the top of the ridge.

Chris said late, "After what seemed like thirty attempts (one of which included a loud BANG while backing up which resulted in no visible body damage), Walt asked me if I was sure my hubs were engaged. I thought about how the boys were playing around my IIA at Buckthorn Camp and suspected maybe they had messed with a hub, and answered "no". I told Walt how to turn the mechanism, and he asked how he was supposed to know when to stop. I replied that it just stopped at some point, and he responded that it no longer operated in that fashion. So, I radioed ahead that I seemed to have had a hub failure, and moved aside so that Walt could get by and winch me up the hill. Walt went up the hill with no problems at all, then turned around (on a very steep slope, I might add), and came back down to winch me." After Walt winched Chris up the worst part, he turned around again (!) and prepared to give a tow, if needed. But Chris managed the rest of the way up to our stop in two-wheel drive. Chris had to do lots of weaving around to find traction, and was overcome by visions of the guy who died at Hollister last October (his vehicle rolled backwards down a hill and he ended up under it).

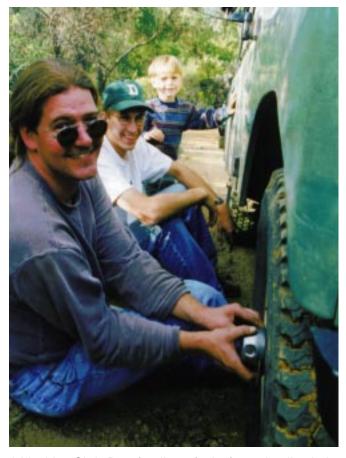
Once Chris reached us, we set about finding out what was wrong with his hub. Inside, we found nothing out of the ordinary. We cleaned out some grime, and tried to refit it. After numerous failed efforts, Ben pointed out what was wrong. We took off the locking mechanism, pulled out an over stretched O-ring, and then put the hub back together effortlessly. It had been on wrong for quite some time. Now it would leak some but would give Chris four-wheel drive again—he would need it!

The ridge top portion of the trail was mercifully brief and we soon reached the intersection of Trails 25 and 23. Like Blair and John (only more so) we were running out of time and had to take the shorter route, via Trail 23. Thus did we descend into another Purgatory of Steep (Yess!), this time a proper-pucker-factor down-hill (PPFDH), complete with steering-defeating ruts at the steepest part, almost to Benmore Creek. This bit caught

most if not all of us sliding sideways and worrying about body damage (this section is one part I'm not quite ready to do in our newly acquired Range Rover with its pristine bodywork). Back across the creek we slithered, with an interesting exit that included a brief sidehill stretch.

The climb back up to the ridge top this time was uneventful but had many alternate routes, some of which might have been fairly entertaining, had we more time. Our time was running out, though, and by the time we reached the main road, dark was approaching. Chris was experiencing more woes, with a CB that was joining mine in tribute to the Prince of Insufficient Light and an exhaust system that decided to detach itself..

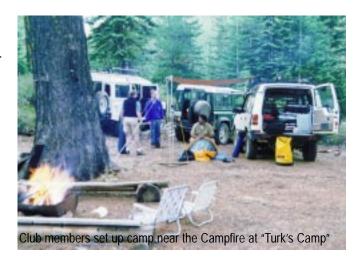
Naturally, we have plans to return when the trails and creeks are somewhat wetter and maybe do the route in reverse or take the longer loop. Preferably both. Won't you join us? And, if you find this trail too tame, there's always the Spruce Canyon Trail (No. 17) which is rated "advanced." Didn't I tell you? The Boundary Ridge and Benmore Loop trails are rated "intermediate."



A blushing Chris Dow fondles a faulty free-wheeling hub.

# Trip Report Cisco Grove and Points North

The NCRC trip on October 18 and 19 went quite well with members showing up by 10:00 am in sixteen vehicles for a club tour of the Sierra north of the Cisco Grove turn off on I-80 (Ed Note: see the last newsletter for directions and location). Bruce Bonar and Stephanie Changaris showed up at the spot of 10:00 to lead the pack. Vehicles ranged from SII 88s to relatively recent Discoverys. The first half of Saturday was spent running the initial portion of the Fordyce trail to Eagle lakes. This is a somewhat bouldery trail with a few moderately challenging steps along the way. Most members made the trip securely to enjoy a lunch break at the edge of the lakes. This trail is essentially one way since it becomes much more difficult past the lakes and basically comes to a dead end at Fordyce creek unless the power dam upstream cuts off water flow. So the club turned around,



headed back toward I-80 and then took a turn north into the forestry roads and trails of the Tahoe National Forest. We meandered our way to the Goat Ridge lookout with an excellent view of the Sierra and foothills then descended to climb to an adjacent ridge (Celina Ridge) where we made camp at what is probably a frequently used hunter's camp complete with fire pits and "parking" areas. Bruce and Stephanie had previously located the camp and lead us there. As is usual an excellent evening was had by all.

On Sunday we continued to work our way north towards the South and Middle Yuba river canyons, stopping in the morning to see a field of rare carnivorous plants. We continued our days driving through some spectacular scenery including abandoned mining equipment. The group stopped for lunch at mine site next to the Yuba river after a long switchback descent. By the time we climbed out of the middle Yuba canyon it was time to call it a day at the town of Sixteen to One near the active mine of the same name. A few members stayed on to visit the Malakoff diggings on the way out while others drove straight back to Auburn and home.

This area has many beautiful sites and the roads are simple enough that any 4wd vehicle should be able to pass through with no real risk of damage. Even the possibility of pinstriping the paint is minimal. Candido Gomez thought the trip was well worth while and had a few thoughts on the trip. "It was nice being with my Rover brothers and sisters for the wee outting. Except for an ouchy on the right rear quarter panel, Tally Ho (Discovery) is none worst for wear and tear. We did see some great back country. This should become an annual October outting for NCRC. Seeing the different types of Rovers and what can be done when money and time are both plentiful gives me hope that I can convert my stock 5 speed Disco into something like Tom's or Armando's Disco."

Look into the area next time your in the region. A good selection of USGS topographic maps will allow you to find your way anywhere but you can easily get by with the Tahoe National Forest map put out by the Forest Service and available at locations such as REI.



Bridge over the Yuba.



Carnivorous plants near Celina Ridge.



Old Mining Equipment



### O H V I n v o l v m e n t

### NCRC Interfacing with the Forest Service

### By: Bruce Bonar

Ever wonder why there are so many more motorcycle trails than 4wd trails in the National Forests? It's simple. The motorcyclists ask for them. They lobby, they attend meetings, they write letters, and they lobby some more. At a recent Off Highway Vehicle/Recreation User Group meeting for the Upper Lake Ranger District, Mendocino National Forest, the NCRC was the only 4 wheel drive club to attend. Morgan Hannaford and I represented the NCRC. There was a lobbyist from the American Motorcycle Association, numerous representatives from several motorcycle clubs, a State Parks OHV official, and two members of the Clear lake Horsemen. There appears to be more room for active involvement on the part of 4WD clubs in presenting their case.

Kathy Mick, OHV technician for the Upper Lake Ranger District, ran the meeting. The meeting began with a review of what the NF OHV program had accomplished since the last meeting. A draft copy of the new Upper Lake RD OHV map was reviewed and there was discussion of what changes could be made to future versions. This map is nicer than the Stonyford RD OHV map and is now available at the Upper Lake Ranger Station and at trail heads. The plan is to update the map every 2 years. The bulk of the meeting was discussion of what suggestions the users had for inclusion in the upcoming grant request to be made by the Upper Lake RD. OHV "Green Sticker" funds provide a substantial percentage of the dollars used for trail development and maintenance. Part of this discussion centered on what type of trails we wanted for 4wd use, what trails fit that description, and if there were any particular trails we wanted reopened or maintained. Most of the discussion focused on motorcycle and ATV use reflecting the greater participation by motorcycle users. Both the OHV ranger and the other users are very supportive of greater participation by 4wd groups.

In order to be more effective at the next meeting in January I plan to make an effort to recce as many of the trails currently open to 4wd's as I can. It's a tough assignment but this calls for sacrifices. By attending meetings such as these and taking an active role in brush clearing and other trail maintenance activities the NCRC can work with the Forest to create new trails as well as preserving the opportunities that currently exist.



## Classified Adds

Classifieds are run free of charge for any club member. Submit any information on items for sale or wanted to the editors along with contact information.

bartlett@slip.net or msandcdg@slip.net or NCRC P.O. Box 14961, Berkeley, CA, 94712-5961.

R380 Gearbox with LT230T transfer box. The R380 needs a new gear. Asking

\$500. Contact Vance Chin at 510-357-2124 for details.

Folding side steps for Series vehicles (1 pair). Asking \$50. Contact Vance Chin at 510-357-2124.

## Project Write-Up: Stealthy Lock Box for the D 90

### By: Jeff Rogers

Like other soft top vehicles, the Defender 90 offers little security for the factory-installed electronic equipment or personal items left in the truck's interior. The electronics and a few odds-and-ends can be better protected from theft with the installation of an after market center console, but what can be done for the tools, off-road gear and personal items that D90 owners find convenient to leave in their vehicles? Fortunately, the trucks interior lends itself to a number of security enhancements.

With this project I set out to build a secure compartment to fit behind the forward-facing rear seat of a '94/'95 Defender. The goal was to create an easily removable lock box that would provide a moderate amount of security without requiring vehicle modification for installation or use. After building several mock-ups, which consumed more than nine large moving boxes and three rolls of masking tape, I arrived at a design that met my storage needs, didn't require vehicle modification and had the stealthy appearance of a factory accessory.

The final design contoured the nearly triangular space behind the rear seat and provided approximately 3000 cubic inches of lockable storage. It featured a fold-down door that offered easy access and also doubled as a working shelf when in the down position. The door could be held shut by the zipper on the upholstered exterior for easy access or locked with a barrel lock for security. The box itself locked to the D90s rear seat mounts via chain link and accommodated the seat belt straps with a pass-through tunnel through the center of the compartment. The piece was finished in a durable black fabric to provide weather resistance and a factory appearance.

The box worked-out well in my mind and in cardboard, but could it be built for a reasonable price? I shopped the design at a number of machine shops and custom car



fabricators. It was going to be expensive to build. I almost quit the project until I met Ron Jenkins at Magnum Force Race Car Fabrication (San Jose, (408)559-6633). Among other things, Rons shop builds custom fuel cells, which resemble the final lock box design. He quoted me an acceptable flat rate and the box was built almost overnight. I then took the box to a local upholstery shop and had the box covered in material left-over from a Porsche 911 Cabriolet replacement top. I now have a reasonably secure place to store things in my vehicle...

NOTE: My decision to make the box light and easily removable lead me to use Aluminum in its construction. The design could provide better security if it were made of steel. Also, a bracket could be welded to the bottom of the box to allow a more permanent mount to the center seat belt anchor. Such a bracket was affixed to my box when first built, but was cut off to make removing the box more easy.





## Mechanics & Parts & Service



The following list contains parts suppliers and mechanics who support and work on Land Rover and Range Rover vehicles. This is not an endorsements list. Before using particular vendors or mechanics we suggest you talk to fellow Land Rover and Range Rover owners regarding their experience and recommendations. Please contact us with any businesses or updates you would like to see added to this list.



P Parts
S Service
D Dealer
NV Newer V

NV Newer Vehicle
OV Older Vehicle

AA After-market Accessory
ABA After-market Body Armor

Atlantic British [ P, OV ]

Box110. Rover Ridge Drive Mechanicville, N Y 12118 tel. 800-533-2210

### Badger Interior Coachworks [soft tops and interiors for Series and Defender ]

Christopher Laws 259 Great Western Road South Dennis, MA 02660 tel. 501-364-2680, fax 508-760-2281

## British Motor Car Distributors [ D, S, P]

901 Van Ness Ave. San Francisco, CA tel. 415-776-7700 dealer, service and parts for newer vehicles

### Britalia [S, P]

2210 San Pablo Avenue Berkeley, CA tel. 510-548-0240 service and parts

## British Northwest Land Rover Co. [ S, P, OV]

1043 Kaiser Rd. S.W. Olympia, WA tel. 206-866 2254

### British Pacific [P]

3317 Burbank Ave. Burbank, CA tel. 800-554-4133

### Cole European [ D, S, P ]

2103 N. Main St. Walnut Creek, CA tel. 510-935-2653

### DAP Enterprises, Inc.

86 Clinton St. Springfield, VT, 05156 tel. 802-885-6660

### Euro Parts, Ltd [P]

1910 Prospect Ave. East Meadow, NY 11554 tel. 800-274-4830

### Great Basin Rovers [P, AA]

342 West 1700 South Salt Lake City, UT tel. 801-486-5049

## Hubacher Cadillac and Land Rover [ P,S,NV ]

#1 Cadillac Drive Sacramento, CA, 95825 tel. 415-460-4600

### RAB Motors [ D, S, P ]

540 Fancisco Boulevard West San Rafael, CA tel. 415-460-4600

### Roverland [S, P]

San Francisco, CA tel. 415-648-0885 service and parts for newer vehicles

### Roverland Parts [ P, NV ]

2038 Village Point Way Salt Lake City, UT 840093 tel. 801-942 7533

### Rovers North [P]

1319 VT Rt. 128 Westford, VT tel. 802-879-0032

### Safari Gard [ ABA, NV ]

41095 Fig St. Murrieta, CA 92562 tel. 909-698-6114

### San Jose British Motors [ D, S, P ]

4040 Stevens Creek Boulevard San Jose, CA tel. 408-246-7600

### Scotty's [S, OV]

(Chevy conversions) tel. 510-686-2255

### Shamrock Services [ S, NV, OV ]

Robert Davison 15195 Arnold Drive Glen Ellen, CA 95442 tel. 707 935-3605

### West Coast British [S]

190 Airway Blvd. Livermore, CA 94550 tel. 510-606-8301

## Northern California Rover Club



### **Membership Application Form**

The Northern California Rover Club is a new club dedicated to providing communication between owners of Land Rover and Range Rover vehicles. We aim to provide a venue for the enjoyment of the vehicles including off road activities and their maintenance by focussing on providing a means of connecting fellow owners. The Club will be holding meetings on alternating months and aiming at producing a newsletter covering issues of interest and providing a forum for communication.

If you are interested in becoming a member of the Northern California Rover Club send this form and a check for \$20 made out to Northern California Rover Club to the following address:

Northern California Rover Club P.O. Box 14961 Berkeley, CA 94712-5961

The \$20 covers membership dues for one year with all the rights of membership outlined in the club bylaws; members will receive an initial membership card and club decal, all newsletters mailed in that period, and an annual directory of club members.

Please provide the following information and indicate if any of it should not be included in the club directory which will be distributed only to other members. The NCRC will assume that all information provided is to be distributed unless indicated otherwise. Please note that members must be over 18 years of age and have a valid driver's licence.

Name:
Street Address:
City, State and ZIP:
Tel. number (day):
Tel. number (eve):
Types of Land Rover/Range Rover owned:
Rover related interests: