

METALCLOAK'S

10² OFF ROAD TIPS



WHAT'S INSIDE?

**Choosing Trails
Vehicle Maintenance
Off Roding Terms
Fighting for Land Use
Volunteering
And Much More...**

Edited by

MATSON BREakey & DEL ALBRIGHT

102 Off Road Tips

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INTRODUCTION

Off-roading is a remarkable adventure into the outback, or a simple drive to your favorite backcountry picnic spot. Wherever your wheels take you, there are shortcuts and tips that will make your adventure all the better. Here at MetalCloak we want you to enjoy every outside moment you can, so we offer you these 102 Off Road Tips to start your journey.

Here you'll find tips for general off-roading; tips for vehicle maintenance; tips on land use; and tips on volunteering. It is our sincere hope that these insights and helpful hints will help you help us keep the fun of this awesome sport alive and our trails open.



GLOSSARY OF IMPORTANT TERMS

To help you better enjoy your sport, your vehicle, and these helpful tips, here are some significant terms you should know. For a comprehensive list of terms, click the “How To” link at Metalcloak.com

LANDUSE TERMS

Administrative Closure: seasonal or emergency road/trail closures that can be in place for a year, with little or no public input.

Area of Critical Environmental Concern (ACEC): a term used by the Bureau of Land Management (BLM) in mostly desert areas where special attention is needed to protect and prevent damage to important resources.

CEQA – the California Environmental Quality Act: California’s version of NEPA which is used on state lands to identify projects and problems, get public input and make decisions about how land will be used (or not).

Endangered Species: a critter or plant is endangered when it is in danger of extinction, and can be just threatened or rare. The Endangered Species Act (ESA) provides the process for determining the status of such species, and what to do (or not do) about it. The ESA has been responsible for many trail and riding area closures.

Landuse: (or land use), sometimes blended in with access; means the designation of how our lands (and waterways) are used by the public.

NEPA – the National Environmental Policy Act: defines the level of documentation needed for projects on public (federal) land, how land will be used, and allows the public to input comments.

Travel Management Rule (TMR): part of the route designation process where all trails and roads have to be marked on a map, with the intent to provide a sustainable system of roads while limited or excluding cross-country travel (off trail).

Wilderness: based on the 1964 Wilderness Act by congress, a land designation that allows no motorized or mechanized travel of any type, including bicycles.

AUTOMOTIVE TERMS

Differential or “pumpkin:” this mechanical device differentiates the power being applied to the wheels/tires by the rotating driveshaft, and allows the road wheels to travel at different speeds, such as when going around a turn. Many solid axles 4x4’s have diff’s front and rear. Some vehicles have independent suspension and do not have diff’s.

Lockers, or Limited Slip: are terms applied to gears/devices that lock the spider gears together in the differential, in either full lock (lockers) or spin reduction lock (limited slip).

4 Wheel Drive: a misnomer in most vehicles as only one tire up front and one tire in the rear have applied power when in 4x4. To get true 4 wheel drive, you need a locker or limited slip in each axle to get all four tires/wheels “locked.”

Rims; Wheels: interchangeable terms for the metal the tire is mounted on. Off-road applications usually require further knowledge of backspacing and rim width, as well as lug pattern (the spacing and configuration of the lug bolts holding the wheel to the axle).

Sway Bar/Sway Bar Disconnect: is a part of your vehicle’s suspension that helps reduce the body roll during cornering or over road irregularities. A properly outfitted 4x4 vehicle will have Sway Bar Disconnects that disconnects the sway bar from the axle allowing the axles to articulate more over the rocks.

4-High/4-Low: Properly outfitted 4 wheel drive vehicles have the option of 4-High or 4-Low. 4-High is for driving on terrain where 4 wheel drive will help you (snow, mud, steep dirt, etc), but you are driving at normal everyday speeds. 4-Low is for going over terrain where the vehicle is required to ”crawl” at incredibly slow speeds for stability and safety.



TIPS FOR GENERAL OFF-ROADING

- Tip # 1:** **Tell a friend.** Prior to venturing off road, be sure to let someone know where you are going and when you expect to return. This way, if you have an issue in the backcountry, people will know where to start looking for you. Also, be sure not to deviate too far from your route.
- Tip # 2:** **Take a map.** Be sure to have a map and a compass with you and know where you are on the map at all times. Although GPS is a great navigation tool, they will not work if they are damaged, lose satellite signal or lose power. A map and compass will get you home in an emergency.
- Tip # 3:** **Travel as a team.** Don't go off road alone if you can avoid it. You need a partner not only for spotting your rig, but also for emergencies where one of you may be incapacitated and need help.
- Tip # 4:** **Leave no rig behind.** In convoys/trail rides, stop occasionally to make sure that everyone is still with you, including the "tail gunner", who is the last driver in the group. Stop at all turns so no one gets lost. Leave no one behind, even when broken down.
- Tip # 5:** **Have a way to communicate.** Many times you will have no cell signal while off-road. Carry a quality CB or, if you are licensed, a Ham Radio. Be familiar with the emergency channels in your area and always know what channel others in your group are on.
- Tip # 6:** **Water up!** Carry plenty of drinking water, as well as some food for your trip into the backcountry. Although you may plan on being back home in a few hours, it is best to be prepared just case something happens and you get stranded. Water could be life-saving, and food will make you more comfortable if you get stranded in the backcountry.
- Tip # 7:** **Take a jacket.** During cold weather, be sure to have extra clothing and perhaps a sleeping bag and small tent in your vehicle, in case you get stranded in the backcountry. Shelter and protection from hypothermia can mean the difference between life and death.
- Tip # 8:** **Prepare a "go bag."** Put together a grab bag of critical personal survival gear (maps, water, food, extra clothes, matches, flashlight, signal mirror, whistle, and cell phone)

to carry in your vehicle at all times. The “go bag” can be tailored to the season. Make it a habit to grab the bag and put it your rig before you hit the backcountry.

- Tip # 9:** **Fuel up!** Never go off road without a full tank of fuel! Seems obvious, but people run out of gas all of the time. It’s another habit to achieve – fill up before you leave.
- Tip# 10:** **Check those tires too!** When you fill up your fuel tank prior to your adventure, be sure to check the pressure in your tires, including the spare. Nothing worse than finding out that your spare is flat. Carry a tire plug kit for those repairs you can make. Don’t forget to rotate your off-road tires like you do your car tires – makes them last longer and perform better.
- Tip # 11:** **Take your lug nut lock key.** Speaking of spare tires, make sure that you have the key to unlock the spare and whatever lug nut locks you use, as well as a jack and wrench. Believe it or not people forget these items all of the time.
- Tip # 12:** **Know your limits.** Don’t hide from your limitations as a driver when going off road. Do not attempt to go over obstacles that are beyond either your rig or your capabilities. Egos and cheering crowds can be dangerous, so know when to call it quits! Facing up to your limits will make you a better wheeler, and keep you from unnecessarily breaking down.
- Tip # 13:** **Click it or ticket.** Be sure to wear your seat belt or harness at all times. Also, be sure to keep your arms inside of the truck at all times. Seat belts do save lives, on and off road. Train your passengers to not put their limbs/hands outside the rig.
- Tip # 14:** **Carry Band-Aid’s.** Carry enough basic first aid supplies in your vehicle at all times to treat any first responder type injuries. Include wraps, bandages, bee sting stuff, and whatever your area dictates for emergencies. Be able to stop blood flow and keep someone breathing.
- Tip # 15:** **Know your rig.** Learn and know the limitations of your vehicle. Understand the manufacturer’s limitations. Just because it is a 4-wheel drive vehicle, does not mean that is a tank or a submarine! All rigs have limits; test yours and know where they are so you don’t break unnecessarily.
- Tip # 16:** **Look before you leap.** It is a good practice to scout what is on the other side of a steep hill, before driving over the top. Never know what could be there or what may not be there!
- Tip # 17:** **Talk it up.** Install a good CB (and/or HAM) radio that allows communication with other users in an emergency, or just to better enjoy a convoy. With CB, the best reception will be at high points along your route or open areas where the terrain doesn’t obstruct line of sight.
- Tip # 18:** **Stay put when stranded.** If you break down and are alone, it is best to stay with your rig and wait for help to arrive. If you have an emergency GPS device, you will be found by authorities. If you’ve left proper word with friends of your route, your chances of being found are better if you’re still with your vehicle.
- Tip # 19:** **Hike out smartly.** If you decide to hike out of the backcountry, after becoming stranded, do so only if you are familiar with the area and are in good enough physical condition to make the full journey to safety. Also, stay on established trails and backtrack your route, unless you are certain of where the trail leads. Do not forget your “go bag” with your survival gear.
- Tip # 20:** **Pick the right speed.** The ideal speed for most trails varies, but usually slower is better. Many trails are traveled at less than 15 miles per hour. In addition, it is a good idea to shift into 4-wheel drive and grab the right gear before you need it. Excessive tire slipping in 2-wheel drive can cause trail damage.
- Tip # 21:** **4 Low and go slow.** On many vehicles, 4L will provide engine-braking on steep descents, which will save your brakes, as well as providing better control.
- Tip # 22:** **Don’t top out.** Do not forget to keep the height of your truck or 4x4 in mind when you are driving off road. If you’re on fire roads or trails in forested areas, low hanging

tree branches can make ugly marks on your roof top or rack. Rock crawling areas might have leaning obstacles that place your roof line against rocks that don't give!

- Tip # 23:** **Rock but don't roll.** Be very careful when traversing steep side slopes, as roll overs are possible. If your center of gravity has been modified, you could be "top heavy" and more prone to roll. Rollovers usually hammer vehicles pretty bad and are not good for the occupants either. Use a spotter you can trust when in doubt.
- Tip # 24:** **Minimize trail impact.** It's all about the conditions of the route that dictate your speed and approach. Slow steady speed is usually the best bet in mud and sand. Remember that it is best to "go as slow as possible, but as fast as necessary." If you get stuck, you were either driving too slow or too fast!
- Tip # 25:** **Pick a good line.** Try to pick a line (route) and stay with it. Keep looking out ahead of your rig and don't focus solely on where your tires are, but on where they will be. If you are looking at your tires outside of the driver's window, all of the time, it is just a matter of time before you lose your good line.
- Tip # 26:** **Deep water crossings are tricky.** When legally crossing deep water, many drivers like to create a small bow wave in front of the vehicle. The wave can displace water in front of the rig, effectively lowering the water level around the engine compartment. To do this, accelerate when you enter the water until a small wave is formed. You want to keep the gentle wave about 3' in front of the bumper. On the other hand, many water crossings can be done with a very slow approach, with little or no current disturbance.
- Tip # 27:** **Avoid sucking up water.** Try to avoid taking your vehicle into water deeper than the axles, even if equipped with an air intake snorkel. Problems can occur in water deeper than this, as it can enter into the engine compartment and drown your computer. Water sucked up through exhaust such as during engine starting while in the water, can blow your engine.
- Tip # 28:** **Scout it first.** Always scout any water crossings, prior to attempting a crossing. Many times the depth is unknown and there could be hidden obstacles. Or you could end up floating your way to the ocean.
- Tip # 29:** **Stay out of fast water.** Don't attempt to cross a body of water that has fast moving water or is flooding. You and your vehicle can be swept away by the current.
- Tip # 30:** **Don't restart in water.** If your rig gets stuck in a body of water, do not cut off the engine and attempt to restart it. You may have difficulty getting it started again, and most likely you'll suck up water through the exhaust and blow your engine.
- Tip # 31:** **Use a winch weight.** Winch cables can be very dangerous to people when they break. It is a good idea to place a towel, jacket or floor mat on the cable to add "weight" to it. This way if it breaks, it will fall to the ground. Use gloves and eye protection anytime you work around machinery like winches. Keep all bystanders out of harm's way.
- Tip # 32:** **Pick a good spotter.** A spotter is a great aid to utilize when crossing an obstacle. However, use a single spotter you trust and not a group. Crowds tend to all yell at the same time and coach a driver. But more than one spotter will confuse the driver and inevitably lead to an incident. Pick one good trustworthy spotter and listen to him/her alone.
- Tip #33:** **Do a 360 walk around.** Whenever you leave the trail and get ready to hit the pavement, give your rig the "360." Walk around your vehicle and look at tires, hanging parts, brakes, and anything that might make you a safety hazard on the way home.
- Tip # 34:** **Stay in charge of your rig.** Keep in mind that the driver controls the vehicle; the vehicle does not control the driver! Lose sight of this and you are going to be in big trouble. Know what your rig is doing and what you are capable of; keep control.
- Tip # 35:** **Know your tire direction.** When driving in deep ruts, be aware of which way the tires are pointing. Often they are not straight ahead and the driver will be surprised

when the front tires grip and try to pull the front end out of the rut.

- Tip # 36:** **Don't spin to win.** Try not to let the tires spin, which means that they have lost traction. Ease off the throttle and let the tires regain traction. Don't bounce your rig either if you want it to get home in one piece.
- Tip # 37:** **Manual tranny and granny.** On manual transmission vehicles, you have to match the amount of throttle to the gear. Don't over power your chosen gear or you'll just spin tires like crazy! Granny gear (1st) works well as long as you aren't pumping up the rpm's and spinning away your traction.
- Tip # 38:** **Know what's hanging low.** Remember that while 4x4s and other off road vehicles usually have high ground clearance, there are still critical parts of the vehicle that are low enough to get hung up on obstacles. Critical components like the oil pan, T-case and differential can be easily damaged if banged too hard.
- Tip # 39:** **Strap it down.** Keep your "go bag", tools and other items adequately secured in the vehicle at all times. Heavy or sharp stuff flying around in the cab while "off-roading" is very dangerous! Use tie downs and ratchet straps to secure loose or dangerous gear that could hit you in the back of the head during an incident or sudden stop.
- Tip # 40:** **Watch your temp gauge.** Monitor your temperature gauge to make sure that you are not overheating. If you see the temperature rising, often turning on the heater will help dissipate the heat. If it continues to rise, stop and check for the source of the overheating. Be sure to let the engine cool off before opening the radiator cap.
- Tip # 41:** **Steer hard in deep mud.** If you are stuck in deep mud, accelerate while turning the steering wheel from side to side. Often this is sufficient to gain traction. However, be aware that you may be heading in a new direction. Better yet, use a strap or winch to recover from your stuck.
- Tip # 42:** **Don't lose your lead.** It is possible to lose tire weights or have them shift when driving off road. Many drivers will make a grease pen mark on the tire where the weights are located on the rim. Then it is easy to determine if they have been lost or have moved, which will save a lot of time trouble shooting the problem if you have a bumpy ride, when you hit the street again. Packed snow in your rims can also change the tire balance dramatically.
- Tip # 43:** **Listen to the elders.** Off-roaders with some gray hair or a few wrinkles, or those that have been around a few trails in their time have tons of advice you can learn from. You might have to learn to sort through the stories, but gain what you can and learn the easy way.
- Tip # 44:** **Beware of beach driving.** If driving on the beach legally, always obey the laws and rules for tidal travel. If rules are not posted, try to stay within 20 feet of the sea and the high tide mark, as this is where the sand will be the firmest. If you stop for lunch or to camp, be aware of the tides! More than a few vehicles have been lost to rising tides!
- Tip # 45:** **Show a friend.** Help keep the sport of four-wheeling alive and well. Introduce someone new to the sport of off road driving. The more responsible people involved the better!
- Tip # 46:** **Always offer to help.** If you see another driver stuck or broken down, stop to offer assistance, even if he already has another driver with them. Otherwise it may be you stranded the next time and he may not stop! Four-wheelers stick together; leave no one stranded.
- Tip # 47:** **MRE for me.** A good food product to keep in your "go bag" is military "meals ready to eat" (MRE). This is what our military members eat when they are deployed in the field. They are not bad and have a long shelf life.
- Tip # 48:** **Smell the flowers.** Take the time to enjoy the surroundings and being outdoors with your friends. You are in the backcountry in areas that not many people get to see. Use a guide book; learn about the history; and enjoy the full experience each time you go.

- Tip # 49:** **Go slow in snow.** Do not forget basic common sense when driving on snowy hard surface roads. Drive at the right speed for the conditions, with good tires, and proper tread pattern (mud and snow where required). If your rig has hubs, put them in before you need them.
- Tip # 50:** **Keep your traction.** Avoid losing traction to get the best performance out of your rig. Often once it is lost it can be very hard to get back! You'll conquer more obstacles and wheel smoother when you keep your traction.
- Tip # 51:** **Air down off road.** Many off road drivers will reduce the air pressure in their tires to improve traction and tire footprint (grip). Don't get excessive with this trick unless you have tires with bead locks or bead rings that hold your tire to the rim. If you do this, be sure to air up once you get out of the backcountry and hit the road. Usually run your tires at the manufacturer rated pressure on pavement, unless...
- Tip # 52** **Big tires are meant for big rigs.** As you add tires that are bigger than stock to your off road vehicle, the manufacturer rated pressure does not apply. Most big tires are designed and rated for larger, heavier, trucks, if you run the recommended tire pressure on a lighter 4x4, your on the road ride quality will suffer. Check the forums or your local shop for recommended tire pressure based on your tire/vehicle combination.
- Tip # 53:** **Carry tools to save the day.** Carry a basic tool kit in your truck, as well as extra fluids. Jumper cables, extra anti-freeze, duct tape, oil, transmission fluid and selected hand tools might come in handy. A big hammer can be particularly useful! Generally, there is no use in carrying tools you don't know how to use, though.
- Tip #54:** **Use quality straps.** When shopping for yank straps, tow straps or winch extension lines, try to look for those that do not store kinetic energy. That way if they break, they just fall to the ground. Use products trusted by your fellow wheelers, and those of proven quality.
- Tip # 55:** **Install rubber valve stems.** Make sure that your tires have flexible rather than solid tire stems installed, which greatly reduce the chances of the stem being broken off in your off road travels.
- Tip # 56:** **Keep the rubber side down.** Try to keep three wheels in contact with the ground at all times. Lifting one tire, or getting air, is not unusual and can be controlled with practice. Getting more than one in the air can be dangerous and result in a roll over.
- Tip # 57:** **A snorkel can be helpful.** Many drivers like elevated air intake snorkels on their vehicles. They allow cleaner air to be taken into the engine, which is useful when following other drivers on dirt roads. Snorkels can also provide a bit of ram-air effect. If your rig is otherwise properly set up for safari type water crossings, an elevated snorkel will help then as well.
- Tip # 58:** **Don't freewheel backwards.** When backing down a hill, be sure to have the vehicle in reverse, which gives greater control. Do not let the rig just free wheel where you have no engine compression or gearing advantages.
- Tip # 59:** **Know your angle of dangle.** Before going off road, become familiar with your vehicle's approach and departure angles, as well as the break over angle. This will help you avoid both damaging your rig when crossing an obstacle, as well as keep you from getting hung up.
- Tip # 60:** **Don't straddle obstacles.** When crossing an obstacle, attack it head on with the tire in front of it. Drive up and over it, not around it. Often if you try to straddle it or go around it you will get hung up on your differential or other belly component.
- Tip # 61:** **Dry your wet brakes.** When you exit a stream/water crossing, be sure to apply the brakes several times to help in drying them out. Wet brakes are not effective; dry them out before you need them.



TIPS FOR VEHICLE MAINTENANCE

- Tip # 61:** **Gas grades are important.** Always use the gasoline octane grade that your vehicle manufacturer recommends. In general, engines run cooler with higher-octane gas, and better on proper octane ratings.
- Tip # 63:** **Tie in your roll cage.** If you install a roll cage to your vehicle, try to tie it into frame or structurally sound locations. If it is only bolted to sheet metal on the floor, it is going to more than likely get ripped off your rig or collapse if you roll over.
- Tip # 64:** **Check your fluids often.** It is a good idea to visually inspect all of the fluids in the engine, transmission, differentials and transfer case after returning from an off road trip. In addition to looking at the levels, you are looking for water contamination, which can cause serious and expensive damage. Milky fluid in your differentials means water got in and the lubricant is breaking down.
- Tip # 65:** **Clean up and touch your rig.** When you return from your off road trip, be sure to clean your rig while paying special attention to the under carriage. If you are cleaning it, you are touching it or at least looking at it to see if problems are developing. This makes it much easier to check for damage and any leaking fluids.
- Tip # 66:** **Don't be a drip.** Keep your vehicle in good condition and free from dripping fluids, as this is bad for the environment. Oil and other fluids on the ground could eventually find their way to the water sources.
- Tip # 67:** **Don't ignore your tires.** Prior to getting back on a hard surface road, inspect your tires for damage including cuts. Pay particular attention to the sidewalls of the tire, as they can be easily damaged. A tire failure as a result of sidewall damage can be very dangerous, especially if you are driving at a high rate of speed.
- Tip # 68:** **Use a crescent and a creeper.** Get under your rig after every trip with a simple crescent wrench of substantial size, while on a creeper, and check bolts, links, and general tightness of everything. This is an easy inspection. However, if you do find loose parts, use the right tool to repair them.
- Tip # 69:** **Find the squeaks.** If your engine belts are making noise or "squealing", check to make sure that the belts are tight and the pulleys are not out of alignment. The popular remedies to stop a noisy belt do not address the real problem.

- Tip # 70:** **Do your maintenance on time.** Always follow the maintenance schedule recommended by your vehicle's manufacturer. Never defer maintenance!
- Tip # 71:** **Don't crack your lights.** Allow headlights to cool off before getting them wet. Often the sudden temperature change can cause the glass to crack.
- Tip # 72:** **Don't gyp your GPS.** If you are using a GPS, be sure to keep the database up to date. Roads and trails change every year and to be effective and useful, you must update your GPS (usually by linking to your computer to hit the Internet). For off road travel, get a GPS that has maps and trails, not just commercial roads and highways.
- Tip # 73:** **Soap as a sealer.** A trick used to seal a leaking gas tank is to rub a white bar soap across the puncture until it congeals to help seal the hole. Be sure to repair correctly once home.
- Tip # 74:** **Panty up when needed.** If you have a fan belt that breaks, some creative drivers have found that panty hose can be used as a temporary belt. Be sure to repair and replace as soon as possible.
- Tip # 75:** **Pepper your eggs.** Leaking radiators can ruin a trip. Some drivers use egg whites or pepper to stop small pin-hole leaks in radiators. You can also carry one of the commercially available radiator additives to stop the leak.
- Tip # 76:** **More panty hose.** Panty hose can also be used as an emergency air filter, or as a wrap on your washable filter under really dirty conditions. The object is to always get clean air to your engine.
- Tip # 77:** **Don't 4 wheel on pavement.** Before getting onto a dry hard surface road, be sure that your 4-wheel drive system is disengaged and that your hubs, if you have them, are out.
- Tip # 78:** **Get the big pieces off first.** If you like your paint job, always hose off the big chunks of mud and dirt before washing it with a rag or a sponge to avoid further scratches. The washing motion will cause the dirt or mud to dig into the paint and clear coat, unless it is removed first with water only. Never leave mud from places like Moab, UT on your rig too long. The paint will suffer.
- Tip # 79:** **Epoxy can save the day.** Many drivers carry a stick of epoxy putty (or liquid weld) in their off road tool kit. It comes in handy to repair damaged oil pans and gas tanks that are leaking critical fluids.



TIPS ON LAND USE

- Tip # 80:** **Advocate for your sport.** Tell people why you love to do what you do in the backcountry. Let them know the treasures we seek, the vistas we enjoy, and the vehicle challenges that improve our driving skills. Don't keep it a secret. Share and advocate.
- Tip # 81:** **Stay off fire roads when fires are burning.** There are thousands of miles of fire access roads in the national forests and BLM available for off road travel. Many are open year around and are only closed to private vehicles during fire season. Be sure to stay off these routes when our firefighters need them.
- Tip # 82:** **Don't mud up the highways.** Try to remove as much built up mud on your rig before venturing onto hard surfaced highway roads. Mud and dirt on hard surfaced roads is dangerous and is not environmentally friendly. In many areas, the Police will ticket you, if they see you tracking up a hard surfaced road with mud. It also looks bad for our image as off-roaders.
- Tip # 83:** **Stay on the designated route.** Stay on established trails to reduce environmental impact. Remember that many environmental groups view our sport as damaging the environment. Lets not give them anything to reinforce that image.
- Tip # 84:** **Share the trails.** When using fire roads, be aware that these trails are very popular with mountain bike riders, so be careful when using them. Often mountain bikers ride in groups, all over the road and like to ride at a high rate of speed on descents.
- Tip # 85:** **Cross creeks where allowed.** Only ford streams as designated points or at obvious hardened crossings.
- Tip # 86:** **Verify if permits are needed.** Before venturing onto public land for an off road adventure, especially in a group, be sure to verify that a special use permit is not needed and that the area is open to off road travel.
- Tip # 87:** **Be careful with campfires.** Be sure to abide by all backcountry regulations if you are camping. Many areas will limit camping to specific areas and ban open fires during fire season. It is everyone's responsibility to obey these restrictions to prevent damaging wildfires.
- Tip # 88:** **Close the gate.** Stay off of private property, unless you have written permission

from the landowner to be on the property; and always leave gates as you found them – usually closed.

- Tip # 89:** **Report violations of the law.** Report any illegal activity to the nearest law enforcement agency. Often off road drivers in the backcountry see things going on that would otherwise go unnoticed. Illegal activities could include hunting and fishing out of season, drinking while driving, open fires during fire season, and drug use.
- Tip # 90:** **Beach driving usually has rules.** If you are driving on the beach, be sure to stay off of areas that are out of bounds. Beach dunes may or may not be drivable. Find out first. It only takes a few incidents to close down public access to beach zones.
- Tip # 91:** **Be cognizant of our image.** The best way to keep areas open to “offroading” is for drivers to be a “good citizen” to the environment, as well as to land owners. Close gates; ask permission; fix it if you break it; report violators; and set the good example.
- Tip # 92:** **Write letters when asked.** Voice your opinion, both in meetings and in writing. When organized recreation groups ask for letters, write one! Get your voice heard. Be part of the solution. Letters count.
- Tip # 93:** **Buy from the right businesses.** Do your shopping at businesses that support landuse and our trail-saving work with obvious donations to raffles and memberships in organized recreation. Ask before you buy.



TIPS ON VOLUNTEERING

- Tip # 94:** **Join groups that make sense to you.** Join a local off road club in your area and get involved. Often, they will host competitions, trail rides, and educational clinics, as well as host weekend trips. Join your national group such as the BlueRibbon Coalition (www.sharetrails.org) and United Four Wheel Drive Associations (www.ufwda.org).
- Tip # 95:** **Mentor a newbie.** If you are a more experienced off road driver, take the time to mentor a new driver. Offer to be his/her spotter or to tag along on a trip driving your own rig. Teach time-learned tricks and tips so that the newbie has more fun than fear.
- Tip # 96:** **Volunteer when you can.** Offer to work as a volunteer at a competition or event/trail ride. Help is always needed and you will be close to the action. When more of us volunteer our time, fewer of us will burn out and leave the sport.
- Tip # 97:** **Work with the organized groups.** Work with organizations that do trail maintenance and repair areas damaged by illegal activity or severe weather conditions. It will show people that while we love “offroading”, we also love the environment and do not condone illegal activities.
- Tip # 98:** **Read the forums and threads.** If you’re a computer person, participate in a positive way in the numerous online forums about off road driving. At least read the educational forums that might help you get more fun out of your rig. If you post up, help portray the sport, as well as the people in the sport in a positive manner.
- Tip # 99:** **Consider search and rescue volunteering.** If you have a good rig, and some experience under your belt, volunteer with hospitals and other emergency response facilities, to assist in bringing critical staff to the facility, when heavy snow hits your area. Often 4 wheel drive vehicles are the only way to get staff to these facilities. Some Search and Rescue outfits love to have 4x4 clubs on their roster of helpers.
- Tip # 100:** **Blend in charities to your events.** While most of your efforts should be directed towards funding our trail-saving work of organized recreation, or your own club, you can blend in charitable donations as well. After the event, be sure the club gets the appropriate recognition by someone writing up a press release.
- Tip # 101:** **Get the key to your public lands.** Have your local club participate in the “Adopt a Highway” program, or some other form of public adoption of lands and highways.

Get your name out there. Improve our image as recreationists who care about our environment.



IN SUMMARY...

Tip # 102: Have fun, be safe, respect the environment and enjoy off road driving!

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ABOUT THE AUTHORS & THEIR ORGANIZATIONS



Matson Breakey

Editor Matson Breakey is the Co-Founder and VP Marketing & Sales for **MetalCloak**, a customer-focused, technology-driven, family-oriented American company based in Rancho Cordova, California.

History...

Metalcloak's heritage goes back to the early 2000's when a group of off-road enthusiasts in Southern California developed the first, full-replacement, bolt-on production Tube Fender for open top Jeeps.

Dubbed Rev111, their team developed Game-Changing product ideas that led to the development by 2005 of the MetalCloak Body Armor System including the original Arched Tube Fender™, the first production Bolt-On Hi-Line Full-Replacement Tube Fender, the first Replacement Aluminum Inner Fender Well, and the first Removable Fender Flare.

In 2009, Rev111 was moved to Northern California, and the name of the popular body armor system, MetalCloak, was adopted as part of the change.

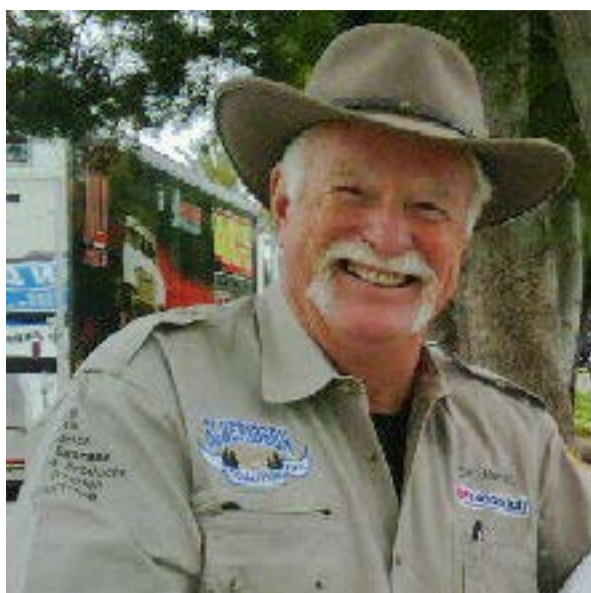
After redefining the original product line, Metalcloak added to it with the Overline™ Full Replacement Fenders, for those who wanted a more traditional look -- solidifying their place as a leader in the development of highest quality aftermarket parts for the Jeep Community.

In 2011, they surprised the market by introducing a revolution in suspension development with the Patented 6Pak™ Long Travel, Compact Body shock absorber followed quickly by the Duroflex™ Joint... the first Vibration Dampening, High-Misalignment Flex Joint resulting in Game-Changing Suspension Systems with unprecedented daily driver ride quality and off-road performance.

Since then they've developed award winning suspension systems and components for the JK Wrangler, the TJ/LJ Wrangler, the XJ Cherokee and the popular Dodge Ram.

Learn more about MetalCloak at <http://www.metalcloak.com>





Del Albright & the BlueRibbon Coalition

Editor Del Albright is an internationally published columnist and outdoor recreation advocate.

As the principle founder of the Friends of the Rubicon (FOTR) and Rubicon Trail Foundation (RTF), Del has nearly 50 years of off-roading under his belt. Serving as an Ambassador for the BlueRibbon Coalition, Del will tell you that JOINING is the first step to saving trails and keeping our sport alive.

Joining starts with the national umbrella landuse group, the BlueRibbon Coalition. The folks at BRC are champions of responsible multiple-use of public lands and fight for all trails; all sports. They represent 4x4's, ATV's, UTV's, snowmobiles, sand buggies, rock hounds, dirt bikes, and hunting and fishing.

BRC's motto is preserving our public lands FOR the people; not FROM the people. It takes a team effort to do that, and BRC partners with many groups to accomplish that. After joining BRC, you should then consider joining your Regional or State Association for your sport. Then also join a local club. Join everything you can afford to join and that makes sense to you and your recreation. It's all about members.

Learn more about Del at <http://www.delalbright.com>.

Learn and join BRC at <http://www.sharetrails.org>



MODERNJEEPER

SHARING THE PASSION



Got Skillz?

The JK Wrangler represents the single largest influx of new Jeep owners in the history of the Jeep. With over 150,000 JK's being built this year alone, more and more first timers are driving off of Jeep dealer lots across the country with a brand new, very capable, off road vehicle.

Unfortunately, most dealerships have neither the time or the inclination to take care of one very fundamental little task... educating the new Jeep owner on what it is he or she just bought.

Terms like Lockers, Sway Bar, and even 4-Hi or 4-Lo have no equal in every day vernacular, yet new Jeep owners are just expected to know and understand these terms.

It was in this spirit that MetalCloak decided in 2012 to host the very first Skillz Day at Prairie City State Vehicular Recreation Area.

Located about 10 minutes from MetalCloak World Headquarters in Rancho Cordova, California, Prairie City is home to the world famous Hangtown Motocross event and Ultra-4's MetalCloak Stampede.

But, it's most unique feature is the 4x4 Obstacle Course with names like Stairsteps, Frametwister and Mini-Rubicon — a well-built facility that offers every level of off-road fun.

Held in June each year, attendees from all over the West Coast converge on Prairie City SVRA for a one of a kind experience. Designed for the total beginner, most attendees have little or no experience off-roading and rock-crawling and many arrive on event day in a recently purchased Jeep.

Some of the most basic questions including “How do I put it in 4wd?” and “What is a locker?” are common and only inspires MetalCloak to work harder to expand the event each year.

After registration and a serving of complimentary coffee and donuts, MetalCloak holds a classic driver's meeting, covering the rules of the event and basic safety standards to abide by.

The overall training is broken down into 10 stations. Each station has a number that aligns with a number on the attendees registration card and focuses on one particular skill or area of training. Initially the attendees are asked to learn about safety and recovery, equipment to take on the trail, and the ongoing fight for land use at walk-up stations manned by experts in the field.

Then the budding Jeepers climb into their rigs and start toward the obstacles. This is when they start learning how to use their Jeep to the fullest... understanding lockers, sway-bars and the difference between 4-Lo and 4-Hi.

The ultimate goal is comfort — a comfortable driver is a safe driver. Within a couple hours, every attendee has had a chance to do multiple obstacles and gain a level of comfort and confidence with their rig they didn't know was possible.

Most training is done by noon and is followed by a complimentary lunch. The afternoon is open play for all attendees and another great chance to increase their confidence level.

While MetalCloak created Skillz Day, the idea is not limited to the Jeep owners who can make it all the way to Northern California... it can be done by any individual, any club, or any group that wants to aid in the cause of helping new Jeep owners learn and understand what it means to "Go Jeepin'."



LEARN MORE AT METALCLOAK.COM

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