

Adventure World

magazine

WINTER 2022

COZUMEL

ADVENTURES IN COZUMEL

ADVENTURE WORLD MAGAZINE

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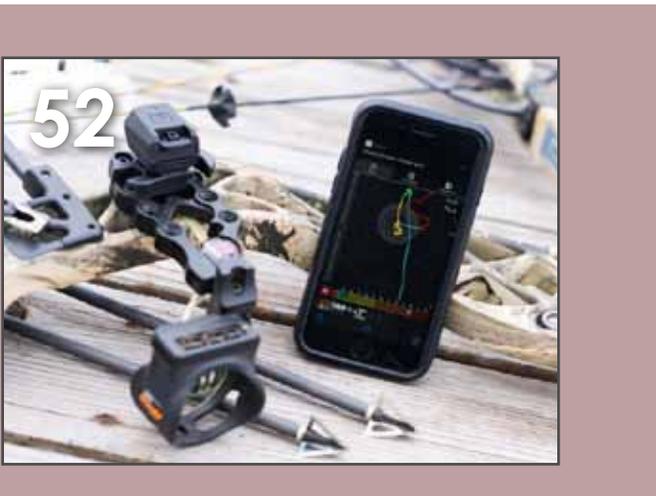


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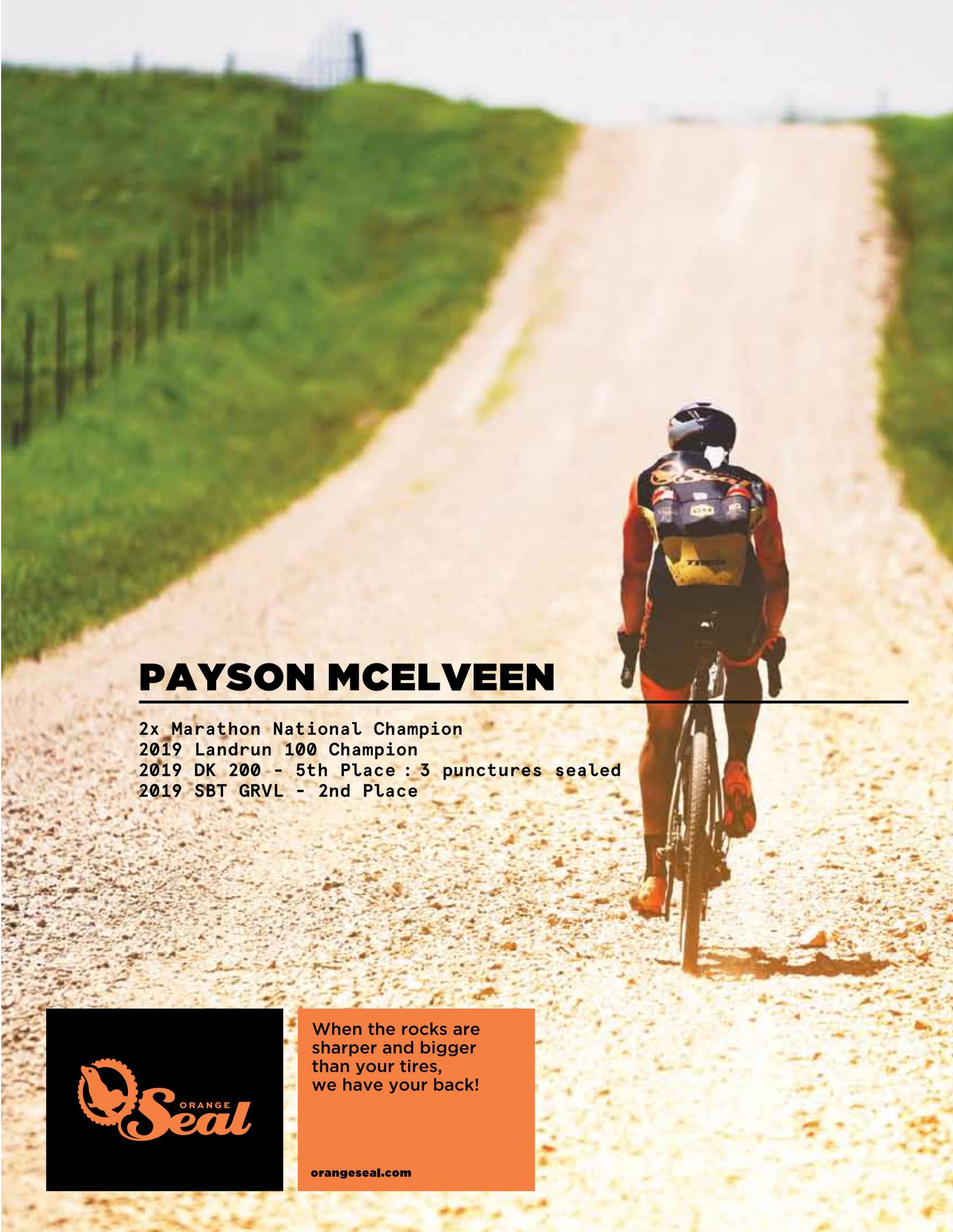


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A cyclist in a red and black jersey is riding away from the camera on a wide, light-colored gravel path. The path is flanked by green grassy fields. In the background, there are some structures and a clear sky.

PAYSON MCELVEEN

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2019 SBT GRVL - 2nd Place



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Underwater Hotels

by Troy Farrar

Sleeping with the fishes is a line you have probably heard in many gangster movies and not something you would want to do in that context. But what if you could actually sleep with the fishes and live to tell about it? Well you can, as several underwater hotels now offer subaquatic experiences in underwater hotel rooms. Enjoy the tranquility of the ocean and the excitement of watching sea life from the comfort of your very own underwater hotel room. There are several underwater hotel experiences available around the world, so take a quick glance and start planning your next bucket list item.

SHIMAO WONDERLAND INTERCONTINENTAL, CHINA

Located 30 miles from Shanghai, the Intercontinental is built on an abandoned quarry. The 18-story hotel has 2 floors that are underwater that include underwater swimming pools. Enjoy nightly water shows or just hanging out in your underwater room and relaxing to your underwater view. Each suite has an aquarium and the resort offers rock climbing, zip lining and other exciting adventures.



RESORT WORLD SENTOSA, SINGAPORE

Resort World offers 11 two story suites that provide both an above and below water experience. The rooms are built on a massive aquarium and offer a unique view to the more than 40,000 fish that live there. The upper level features an outdoor patio with a jacuzzi that is perfect for relaxing before going below. Built in one of Asia's largest underwater theme parks, floor to ceiling windows provide an amazing hotel experience.





ATLANTIS THE PALM DUBAI, UAE

Located on the famous palm tree shaped island, Atlantis the Palm offers spectacular views from their floor to ceiling windows. The hotel is built on Ambassador Lagoon, the resort aquarium, and offers a glimpse into the 65,000 plus marine animal's lives who live there.



MANTA RESORT ZANZIBAR, TANZANIA

The Manta Resort is built on a beautiful beach on an East African Island. The resort has seafront villas and a floating room with an underwater bedroom. Sunbathe on the deck, swim in the serene waters and sleep beneath surface of the Indian ocean in this unique hotel.



LOVERS DEEP, ST LUCIA

Based in St. Lucia, Lover's Deep is a submarine that will allow you to have a Captain Nemo like experience. Enjoy your mobile, underwater hotel room as you travel the depths of the Barbados, taking in all of the sea life. Lovers Deep comes with a captain, chef and butler whose quarters are at the other end of the sub so you have maximum privacy.



REEFSUITES, REEFWORLD, AUSTRALIA

Reef suites is part of Reef World and gives guests a chance to sleep in the world's largest tropical coral reef. The two submerged suites are suspended beneath Reefworld, which is a permanently moored floating pontoon in Australia's Coral Sea near the Whitsundays archipelago. The suites have windows and lights so the guest can even see what is swimming around at night.

REEFSLEEP, REEFWORLD, AUSTRALIA

Reefsleeper allows guests to sleep on a special reefbed under the stars on the deck of Reefworld, which is a permanently moored floating pontoon in Australia's Coral Sea. Although the bed is above water, there is a viewing gallery under the pontoon with full-length windows providing a great view of the reef. Guests can sun bathe, swim, snorkel and even take a ride in a semi-submarine.



JULES' UNDERSEA LODGE, USA

Jules' Undersea Lodge is located at Key Largo Undersea Park and actually requires guests to scuba dive to get into the undersea hotel. The lodge is moored 21 feet under the surface in a tropical mangrove lagoon and provides guest with a unique view of the aquatic life surrounding the lodge. Guest can bring their own food or hire a "mer-chef" who will scuba dive down to your room to make a meal of your choice. There are several excursions guests can choose including a dive to the Undersea Garden to see how vegetables and herbs are grown in underwater spheres. Jules' Undersea Lodge sleeps up to six overnight guests in its two chambers, which are separated by a wet room with a "Moon Pool", where guests arrive and depart.



THE MURAKA, CONRAD MALDIVES RANGALI ISLAND, THE MALDIVES

The Muraka Suite at the Conrad Maldives Rangali Island is a 3-bedroom, double level suite that allows guest to stay 16 feet under the surface of the Indian Ocean. Guests access the underwater chamber which includes the master suite by taking a private elevator or a spiral staircase. The 180-degree curved acrylic dome provides guest with an amazing view of the surrounding sea life. The suite includes another above water bedroom with a sun deck, pool and a ladder that leads allows guests to go for a dip in the Indian Ocean.



ITHAA UNDERSEA RESTAURANT, CONRAD MALDIVES RANGALI ISLAND, THE MALDIVES

In addition to the undersea suite, the Conrad Resort has the world's first all-glass undersea restaurant. The unique Ithaa Undersea Restaurant sits 16 feet below the Indian Ocean's surface and provides guests with an amazing view of the local sea life. **AW**



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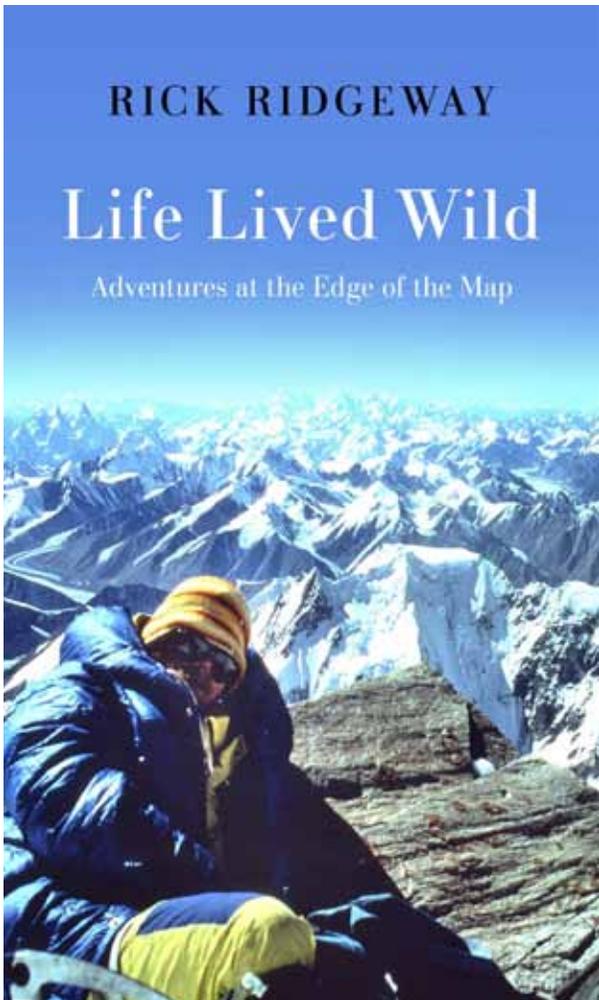
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Product Reviews

WINTER 2022



Life Lived Wild: Adventures at the Edge of the Map by Rick Ridgeway

“A life worth living is lived at the edges where it is wild.” Rick Ridgeway calculates that he has spent over five years sleeping in tents in faraway regions of the world. For the first time, the master storyteller, adventurer and environmentalist compiles a lifetime of stories of climbing high mountains, interacting with remote cultures and “bearing witness to the majesty of the wild world” into a memoir that spans 50 years. Life Lived Wild: Adventures at the Edge of the Map covers news-making adventures like the first American ascent of K2; the first direct coast-to-coast traverse of Borneo; the first crossing on foot of a 300-mile corner of Tibet so remote no outsider had ever seen it. He shares unbelievable highs and lows that come with a life devoted to exploration – from mountaineering firsts across six continents, painful bouts of frostbite, to a chance encounter in Kathmandu where he met his wife Jennifer. Conservation became a central passion and career path for Ridgeway. “I find abiding satisfaction in knowing that whatever years I have remaining,” he says, “I will use them to do what I can to safeguard what remains of the wild places of my cherished home planet.” Experience the highs and lows as you join in the journey with Rick Ridgeway to some of the wildest places on the planet. www.patagonia.com/shop/books

Hustle Clean

Hustle Clean was designed by athletes to cleanse and refresh your body after a hard workout. They are also great after competitions, during travel, while camping and in just about any other situation that causes you to sweat. Paraben free and sulfate free, Hustle Clean is safe for kids and has Aloe Vera, Witch Hazel and Vitamin E to refresh your skin. The antibacterial and antimicrobial wipes kill 99.9% of germs and are big enough and tough enough to clean, sanitize and deodorize your body after most activities. Available in fresh, lavender and unscented each box contains 10 individually-wrapped wipes. www.hustleclean.com



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Product Reviews

WINTER 2022

TIY (Tie It Yourself)

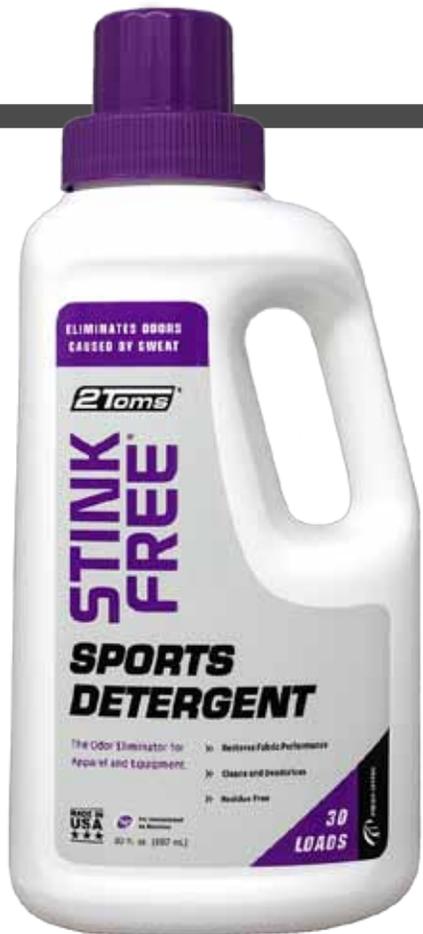
Whether you are seeking the ultimate ponytail, desiring an awesome topknot, securing the perfect set of braids or keeping your hair in place during a rigorous athletic event, TIY has you covered. TIY is a fully customizable, unbreakable hair tie. Just unwind your desired length, cut and tie and you are ready to go. TIY is a one-of-a-kind product that you customize for your type of hair and activity that will not fray, split, break, or wear down. Loop it once, twice, or 10 times if you want, you design the perfect length for your hair. Available in over 20 colors, you can order the pro which comes in a handy case with a built in cutter or the basic which has less material and is packaged loose. Keep your hair where you want it with TIY. www.tiyproducts.com



Sport Spuds

Sports Spuds is a great all-natural fuel for your next sporting event or camping trip. Say goodbye to chemicals, processed mixtures and super sweet sugary foods and say hello to an organic, vegan, gluten free, potato-based alternative. Grab a pouch and load up on natural, slow-burning carbs for your next outing. Available in celtic sea salt with a touch of organic grapeseed oil, sour cream and chives or white cheddar, Sports Spuds are also a perfect between meals snack. Sports Spuds are packed with vitamins, minerals and long-chain complex carbohydrates which will keep you fueled for endurance events without upsetting your stomach and spiking your blood sugar. www.sportspuds.com





2 Toms Stink Free Sports Detergent

2 Toms Stink Free Sports Detergent uses a high-end residue lifter to restore both performance and breathability to your athletic clothing and gear. 2 Toms guarantees their detergent will remove odors and stains in your athletic apparel and equipment. The detergent is fragrance free, will restore performance in technical fabrics and remove all sweat stains. Use 2 Toms Stink Free Sports Detergent in the washing machine or soak gear in a mixture of 2 Toms and water for awesome results. www.medi-dyne.com

Lucyd Lyte

Lucyd Lyte are stylish and light weight eyewear with built in Bluetooth speakers. Flush mounted speakers in each arm provide an open ear design which is much safer than headphones, allowing the listener to be aware of their surroundings at all times. The Lucyd Lytes come in 6 different frame styles with 16 different lens choices including polarized, progressives, readers and transitions. Lucyd's glasses feature a noise-cancelling mic which actually provides clearer call quality than talking on the phone by itself. The magnetic charger will charge the battery in only 2 hours and once charged, it will provide 6-8 hours of playback and 160 hours of standby connection time. The 5.0 Bluetooth will connect with most phones, PCs and smart watches and boasts a 100-foot range. The IP-56 splash proof Lyte is controlled by 2 buttons on the arms which allow call answering, play, pause, track skip, volume adjustment¹ and voice assistant activation. The Lucyd Lytes come standard with polarized silver UV400 lenses, a flat-folding hard case and a soft case, a USB charging cable and wall adapter, a cleaning cloth and quick-start guide. Lucyd Lyte are durable, fun and stylish glasses that allow you to listen to your favorite music or podcast or talk on your phone while on the go! www.lucyd.co



Product Reviews

WINTER 2022



BU SPF 30

BU SPF 30 sunscreen provides great protection without the sticky and oily residue. The broad-spectrum UVA/UVB sunscreen is applied in what BU calls a WOWmist spray that feels like a puff of air, creating an invisible layer of sweat and water-resistant sun protection. Designed for active lifestyles, the sunscreen is enriched with antioxidant- Vitamin E to eliminate free radicals and prevent premature aging. Available in fragrance free, natural citrus, white sage BU SPF 30 will provide great protection without the mess. www.busunscreen.com

Teleties

Teleties were designed to hold strong, hurt less and they double as fun bracelets. The water-resistant spiral design creates a strong grip that locks hair in place, providing support while reducing scalp tension. The spiral form and smooth surface have less direct contact with your hair providing for an easier and less painful removal. Teleties are available in 3 sizes, plus a headband with a ton of color and pattern variations. Teleties donates a portion of each purchase to FORCE, a non-profit organization that supports families affected by hereditary breast, ovarian and related cancers. www.teleties.com



Caterpy No Tie Shoe Laces

Caterpy No Tie Shoe Laces are exactly what their name implies. The non-tying laces utilize a patented elastic technology that provides adjustable tension between shoe eyelets. Easy to use, just lace up once and you will never need to touch your laces again. When you are ready for shoes, just slip them on and go. Caterpy uses a patented elastic bump technology to dial in the perfect tension in each row of the shoe. Caterpy laces are guaranteed to last the life of at least one pair of sneakers and will help give you the ability to dial in the tension in your shoe laces. www.caterpy.us **AW**



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Making the Cut

by Izzy Farrar

Last year I tried out for the middle school track team, I didn't have any high expectations but the coaches promised that no long-distance runners would be cut. I was excited to try something new, even if I wasn't the fastest, I would still have fun trying out a new sport. After tryouts, the coaches posted the results and my name wasn't up there. They had decided that enough people had tried out that they were going to make cuts. I was disappointed, but I figured that I am not fast enough and running just might not be my sport.

This year, on the first day of school, I walked into first period volleyball and I met the head track coach. He told me that I have the build of a long-distance runner and I should consider trying out for either cross-country or track. I couldn't run cross country as it was at the same time as volleyball season, but track wasn't until the spring. I told the coach I would consider it, but I wasn't even sure I liked running, let alone was fast enough to make the team. He told

me not to worry about how fast I am, that I would make the team – I was cautious as I had heard that before. Then he said that I might even surprise myself by the end of the season. I decided that I would try out when volleyball season ended, as the worst that could happen was me getting cut again.

I showed up to my first mile time trial with low expectations. I had just come of a hamstring injury, had not been training, and the cross-country girls I would be running against had just finished their season. I expected to be pretty slow, maybe even come in last, but I did better than I expected. I finished with a time of 7:15, coming in at about the middle of the pack, with only 3 freshmen girls finishing ahead of me. The coach threw me into training with the rest of the cross-country





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team and a week later at the next mile time trial I was feeling a little more in shape and a lot more confident. The goal set by my coach was to make a sub 7 minute mile. He told me he believed I could do it, but if not, it would be OK. He believed I would achieve it eventually. I started off pretty strong but as I finished the 3rd lap, I knew I was going to have to push really hard to make that sub 7 minute time, and my coach knew it too. He ran my entire last lap with me yelling and encouraging me to pick up the pace, and I made it - a 6:52 PR!

My coach saw potential in me when no one else did and he pushed me to run a time I never thought I could run. I'm now training as a part of the track team and getting faster every day. The other girls on the team are nice and also encouraging. Having someone that sees what you are capable of makes a big difference. They can push you to set new goals and help you to eventually achieve those goals. Running for a fun and encouraging coach makes for a much better time and has motivated me to keep working hard as I learn just how fast I can run. This whole experience has taught me that when you surround yourself with positive, encouraging people, you never know what you might achieve. **AW**

RV PRODUCT REVIEWS

2 Toms Stink Free Shoe & Gear Odor Eliminator

2 Toms Stink Free Shoe & Gear Odor Remover guarantees that it will remove odors caused by sweat in your gym bag, shoes, gloves, locker and sports equipment. Just spray Stink Free on your gear until the odor is eliminated. 2 Toms does not mask the smell with perfumes, it actually removes the stink. The odor eliminator is safe to use on leather, canvas, denim and most other materials and is great as a preventative before your gear starts stinking. So, get rid of the stink with 2 Toms Stink Free Shoe & Gear Odor Remover. www.medi-dyne.com



Camp-Zero 20 Carry All Backpack Cooler

The Camp-Zero 20 Carry All Backpack Cooler is a versatile cooler that will help keep your food cold on your next adventure. The cooler features a durable, waterproof and puncture resistant 600D/TPU coated shell. Commercial grade closed-cell insulation keeps everything cold and an anti-microbial liner prevents mold and mildew from forming in the cooler. The roll top closure keeps your contents secure and you can carry the cooler with the heavy duty sewn webbing handles or the removable backpack shoulder straps. The 20 can cooler has a zippered front pocket which is perfect for securing your wallet or car keys and the integrated tie downs can be used to lash other gear to the cooler or to lash the cooler safely into place. The Camp-Zero 20 Carry All Backpack Cooler is the perfect companion for your next big adventure. www.camp-zero.com **AW**

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Some Like It Hot!

by Troy Farrar

We all love to be outside and a ton of great outdoor adventures happen in cold weather. From Friday night football games, to back country camping or a day on the slopes, exposure to cold weather can bring your adventure to a grinding halt. Thankfully there are some great products that were designed to keep you warm and extend your adventures in cold and wet climates. We tested and reviewed some of these HOT products and suggest upgrading your wardrobe so you can stay warm and stay outside as long as you want on your next cold weather adventure.

Volt Tatra Heated Gloves

The Volt Tatra Heated Gloves will keep your hands warm all day on the slopes. The women's small gloves are perfect for kids' little fingers but work great for adults as well. Simply plug in the lithium-ion batteries, choose your heat setting, slip them into the zippered pockets and enjoy the heat. The battery pocket features a waterproof zipper and a display window that allows you to see the power level setting and adjust the temperature without taking the battery out of the pocket. The gloves feature 4 heat settings (High: 2 hours, Med/High: 3 hours, Med: 5 hours, Low: 8 hours) and warm the front and back of the hand as well as the entire length of each finger including the thumb. The outer gloves have a heavy nylon shell with a soft reinforced leather palm along with an adjustable nylon wrist strap and elastic cinch cord on the cuffs to keep the nasty weather out. Inside the gloves feature a breathable waterproof membrane to keep your hands dry and a soft tricot lining with 150 grams of premium insulation to keep the heat inside the gloves. The Tatra come with 2 batteries and a dual wall charger that can charge both batteries at the same time. Perfect for you and the kiddos, say hello to the Volt Tatra Heated Gloves and say goodbye to cold hands. www.voltheat.com



Gobi Heat Vertex Heated Ski Gloves

The Gobi Heat Vertex Heated Ski Gloves are stylish and functional gloves that will keep your hands toasty on the coldest days in the mountains. The Vertex utilizes 3 one touch heat settings (low 113° F, medium 131° F and high 140° F) combined with heating elements that run up and around each finger to keep your hands warm for up to 6 hours (low: 6hrs, medium: 3hrs, high: 2hrs). The Vertex look great, combining a stylish, water resistant leather and nylon outer with a Thinsulate lined inner. You can wear the Vertex as a regular glove or slip in the 2 lithium-Ion batteries for hours of heated bliss. The Etip Finger Pads make it easy to use a device and the gloves also include a buckled wrist strap and cinch bungees so you can lock in a snug fit and lock out the cold and snow. The Gobi Heat Vertex Heated Ski Gloves are lightweight, comfortable, durable and easy to use heated gloves that will keep you warm and looking great on the ski slopes or at your local Friday night football game. www.gobiheat.com



Heat Factory Women's Heated Lightweight Fleece Gloves

Most women I know have a problem keeping their hands warm when it is cold – introducing the answer, the Heat Factory Women's Heated Lightweight Fleece Gloves. These polyester/spandex gloves can be used as regular gloves or boosted by slipping a couple of hand warmers into the concealed top pockets. The fleece gloves feature a honeycomb plastic texturing in the palm which gives great grip even when wet and touchscreen thumb and index fingertips make it easy to use devices while wearing the gloves. The Heat Factory Women's Heated Lightweight Fleece Gloves come with a pair of handwarmers and are a great light weight solution to cold hands. shop.heatfactory.com



Ororo Heated Seat Cushion

The Ororo Heated Seat Cushion will help fight back the elements even on the coldest day. The cushion is powered by a 5200mAh battery that provides 5.5 hours of heat on high, 9.5 hours on medium and 11 hours on low. The Heated Seat Cushion uses memory foam that contours to your body and has 6 heating elements that keep the whole cushion warm. The bottom of the cushion features non-slip grip dots to keep it in place and a handy battery pocket with a Velcro closure to keep the battery secure. Available in black or flecking grey, the cushion comes with a battery and a 41-inch USB charging cable with a wall adapter. The Ororo Heated Seat Cushion conveniently folds in half for travel and is both water and stain resistant. Cold football stadium bleachers, frigid camping conditions or a chilly volleyball game in an icebox of a gym are no match for the Ororo Heated Seat Cushion. Grab an Ororo Heated Seat Cushion and never fear those cold seats again. www.ororowear.com



Volt Outfitter Heated Jacket

The Volt Outfitter Heated Jacket's foundation is a stylish and soft canvas jacket with a plush flannel lining. These features alone make this a really great jacket; however, the Outfitter has a built-in secret weapon for those really cold days. The Outfitter is equipped with a double heat system that features a whopping 8 heat zones. The jacket has four heat zones in the back controlled by 1 battery and another four heat zones - 2 in the chest and 2 in the pockets, to keep your hands warm, controlled by a second battery. The batteries tuck away into 2 inside hidden pockets that have a Velcro closure to keep them safe and secure. The Outfitter has 2 hand pockets and two chest pockets with snaps for carrying any needed gear. The jacket comes with two USB rechargeable 5v batteries and will run on any 2 amp output power bank supplying over 2 hours of toasty heat on high and over 5 hours of heat on the low setting. The Volt Outfitter Heated Jacket is perfect for the hunting lodge, a football game or even a night on the town and the Outfitter will keep you warm and looking great on any outing. www.voltheat.com



Fieldsheer Backcountry Heated Jacket

The Fieldsheer Backcountry Heated Jacket is a great all-around winter jacket with lots of layers to protect you from the cold, including one that is Bluetooth connected. Fieldsheer starts with a lightweight nylon outer shell that has Waterpell technology to keep you nice and dry on those wet days. The middle layer is a Primaloft synthetic down fill and the inner layer is a polyester liner with Zapsheer, an anti-static technology. The final layer is powered by a 7.4v rechargeable lithium-ion battery and features left chest, right chest and upper back heating zones. The battery will charge in less than 4 hours and features 4 heat settings, providing 2 hours of 135° heat on high down to 10 hours of 90° heat on low. The settings can be adjusted by using the integrated waterproof color-coded touch control button or the unique MW Connect Bluetooth App. MW Connect provides real time battery levels and allows you to toggle through all connected Fieldsheer garments and adjust the individual heat levels for each garment. The Backcountry Heated Jacket is available in black, morel or slate and features dual zippered hand pockets and an internal storage pocket. The jacket comes with a 7.4 v rechargeable lithium-ion battery, a USB charging cable and stow bag. The Fieldsheer Backcountry Heated Jacket is a versatile piece that can be worn as an outer jacket or inner layer on those really cold days. www.fieldsheer.com



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Volt Victory Heated Sweater Jacket

The Volt Victory Heated Sweater Jacket features their Zero Layer heat system which guarantees you will stay warm in cold weather. The first layer is the shell, which protects you from the elements, and Volt uses a soft wool/poly sweater material on the Victory. Next comes the laminated waterproof and windproof insulation layer that reflects the heat back to the body to keep you warm. Heat is the final layer, and the Victory has 2 heating pads in the chest, one heating pad in the back and one in the collar with the sole job of keeping you toasty. The jacket is powered by a rechargeable 5V USB battery which will run on High (150°) for 5+ hours, Medium (130°) for 7+ hours and Low (115°) for 10+ hours. The inner material is soft and feels like a micro fleece. The jacket has 2 zippered hand pockets and an inner zippered battery pocket. The Volt Victory Heated Sweater Jacket is soft, stylish and great as a stand-alone jacket or as a soothing heated jacket on those colder days. www.voltheat.com



Ororo Unisex Heated Fleece Hoodie

The Ororo Unisex Heated Fleece Hoodie is a great looking casual jacket that will keep you warm on those cold and wet days. The stylish zippered drawstring hoodie has a soft, thick fleece lining that will provide plenty of warmth for everyday wear. When you need a heat boost, just activate the 3 carbon fiber heating elements which are in the right and left chest and the upper back. The Ororo rechargeable lithium-ion battery will provide 3 hours of heat on high, 6 hours on medium and 10 hours on the low heating setting. The Fleece Hoodie has 2 hand pockets, one zippered inner pocket for stashing gear and a second zippered inner pocket for securely storing the battery. The hoodie comes with a rechargeable lithium-ion battery that has a USB charging port for devices, a USB charging cable will wall adapter and a handy carrying bag. Available in black or flecking gray the Ororo Unisex Heated Fleece Hoodie will quickly become one of your go to jackets during the winter. Perfect for wearing to class, to the gym, for tailgating or just beating around town, the Ororo Unisex Heated Fleece Hoodie will keep you warm and cozy. www.ororowear.com



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Sawyer

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Ignik Heated Pad Cover

The Ignik Heated Pad Cover is the answer to those cold nights camping in a tent. Simply attach the pad cover to your full-length sleeping pad using the sewn-on attachment straps, connect a 5v USB or 12v power supply and start enjoying the heat. The 12v power heats up in 2 minutes, providing up to 140 degrees of immediate heat in the 2 RCS Heat Zones. Ignik even makes a vehicle adapter that will plug into your cars 12v lighter socket on one end and directly into the pad cover on the other end. The 5V USB Adapter, which comes with the pad cover, conserves energy as it gradually warms up to 80 degrees. Available in short and full-size versions, the Ignik Heated Pad Cover is a welcomed sleeping companion on those cold nights. www.ignik.com



Heat Factory Contour Beanie

The Heat Factory Contour Beanie features soft insulating fleece on top and a pair of heat warmer pockets located over each ear that provide a one – two punch against the cold. The polyester/ spandex beanie is a one size fits most and features a streamlined design that will not bunch up under helmets. Available in Mossy Oak or black, the women’s version even has a cutout in the back for ponytails. The Heat Factory Contour Beanie includes a set of warmers and is perfect for your next hunting, trail running or outback adventure. shop.heatfactory.com



Heat Factory Heated Deluxe Balaclava

The Heat Factory Heated Deluxe Balaclava will help keep you warm on those cold windy days. The balaclava features five integrated pockets sewn over the ears, chest and back of the neck that hold warmers which will heat for up to 10 hours. The Balaclava features a double layer mouthpiece for extra warmth with breathing mesh to prevent glasses or goggle fogging, extended length so it can be tucked in to prevent heat leakage and the skull cap can be folded back in warmer weather. Available in black or mossy oak, the US made, heavy-duty fleece Heat Factory Heated Deluxe Balaclava comes with 2 warmers and will keep you toasty on your next adventure. shop.heatfactory.com





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Gobi Heat Terrain Heated Camping Chair

The Gobi Heat Terrain Heated Camping Chair is your secret weapon for your next outdoor adventure. Gobi Heat started with a high quality 300 pound capacity camping chair which features a durable steel frame that quickly folds and stores in the included storage bag. The chair is made from wind and water resistant polyester fabric with polyester padding and has 2 heat zones - one in the lower back and one in the seat. The 7.4Volt, 6,500 lithium polymer battery stores in a zippered pouch on the side of the chair, can be used to charge devices and provides 9 hours of heated seat bliss on low (113°F), 6 hours on medium (122°F), and 4.5 hours on the high (131°F) setting. The camping chair features a simple 1 touch controller and uses conductive thread heating technology to provide the warmest and longest run time heated chair on the market. The Terrain Heated Camping Chair is perfect for soccer games, camping, hunting or just hanging out by the fire pit in your back yard and it will keep you nice and toasty on those chilly days. www.gobiheat.com



Fieldsheer Premium BT Heated Insoles

The Fieldsheer Premium BT Heated Insoles will keep your feet nice and toasty and they even feature handy Bluetooth connectivity. The MW Connect App provides real time battery levels and allows you to toggle through all connected Fieldsheer garments and adjust the individual heat levels for each garment. The insoles use an integrated 3.7-volt rechargeable lithium-ion battery to power the heat zone under the toes and under the largest portion of your foot providing high heat for 2+ hours at 150°, medium heat for 3.5 hours at 140° and low heat for 7 hours at 115°. The heated insoles come with an internal battery and a split micro-usb charging cable so you can charge both insoles at the same time. Fieldsheer's ultra-thin design insures their insoles will fit in just about anything you need from ski boots to running shoes. From cold jobsites to camping to a day on the slopes, the Fieldsheer Premium BT Heated Insoles will keep your feet warm, extending your time outside. www.fieldsheer.com **AW**



Adventures in Cozumel

by Jennifer Opiela-Miksch





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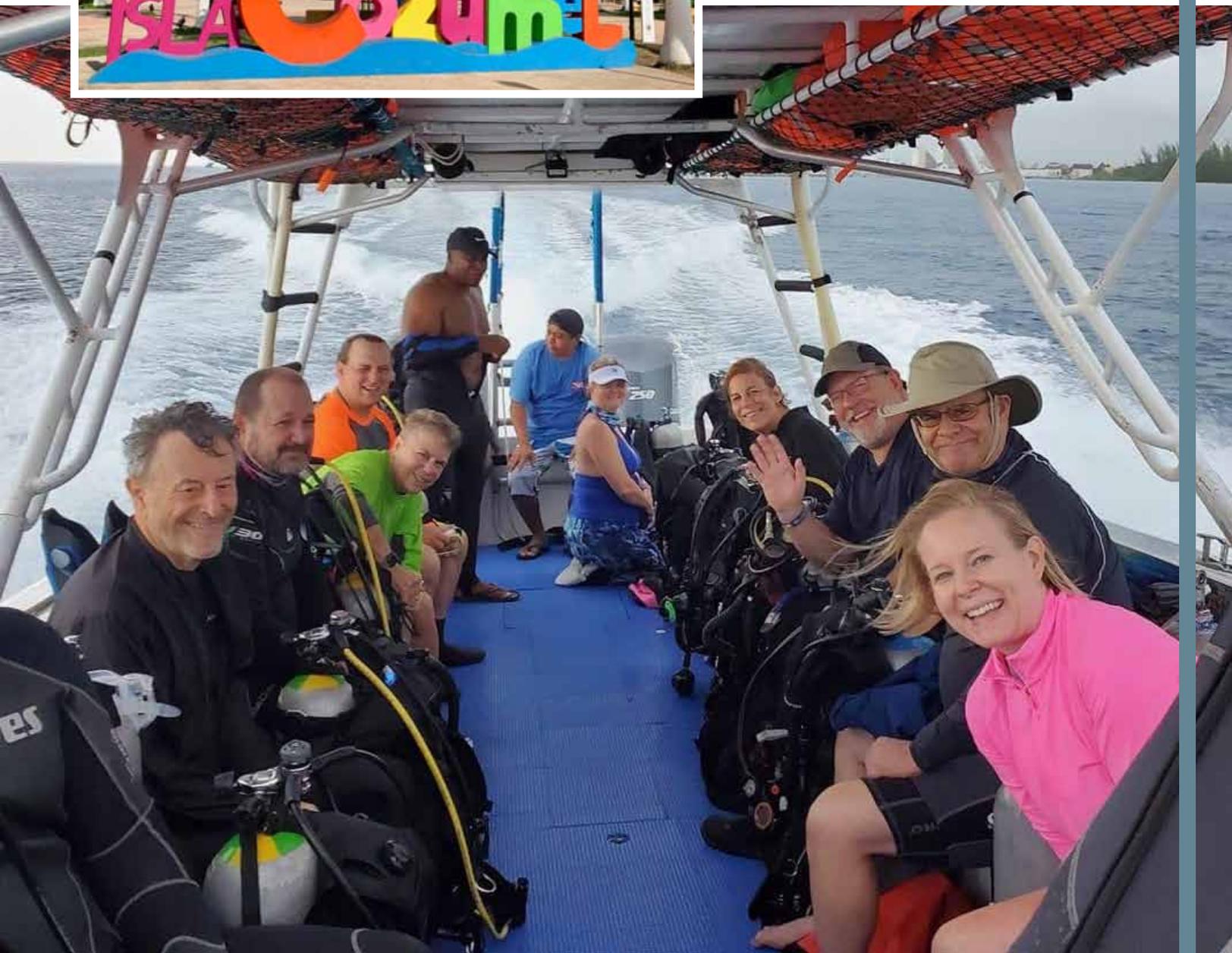
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Ding...Ding...Ding. Long before you open your eyes, you hear the clang, clang, clang of the aluminum tanks being delivered to the dock in the back of trucks. The buzz of the motorbikes and whirr of the traffic begins to build as deck hands head to the marina. Soon, the entire area along the Av. Rafael E. Melgar in Cozumel, Mexico is a beehive of activity as divers arrive with packs full of equipment, excited about the day ahead.

The divers wait patiently on the dock as the tanks are counted and loaded onto the boats. Bags of scuba gear are handed across and finally the passengers are welcomed aboard, ready for a day of adventure.

Cozumel is an island for adventurers.

Cozumel is known to divers around the world for its drift diving. This drift can be gently flowing, or a brisk journey over the reef below, depending on the season. The key is learning how to ride those currents.





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Above water, the gear can feel foreign and cumbersome. The air tank is heavy and the fins awkward. The giant stride off the end of the boat into the waves can bring a sudden, unexpected surge of anxiety. But then, air is released from the BCD, the diver's buoyancy control device, and you sink below the waves into a different world.



The giant blue expanse of water brings a transformational peace, in contrast to the noisy world above. Glancing up, you see the waves crashing above as you gently float down towards the sand below. Even 60 feet below the surface, the bottom of the boat can still be clearly seen. First on the agenda is to clear the building pressure in your ears as you descend, and establish neutral buoyancy to avoid landing on the sandy bottom below. This is done through a combination of proper weighting and proper equipment distribution. When riding the drifts of Cozumel, proper buoyancy is essential.



Ears are clear, the group has gathered behind the dive master and your attention turns to the world around you. The world below you is a whirl of color and activity. On what appeared to be brown rocks from the surface, eyes now register vibrant red, yellows, greens, and purples. Snaking lavender soft corals wrap around fans of red and green, swaying in the current. Mounds of yellow and green sponge, often with turtle bite marks, cover the rocky reef.



Looking closer, fish of all shapes and sizes ride the current, some in schools, some in pairs or solo.

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Red and white Squirrelfish hide below the current in the reef seeking shelter, while the brilliant blue and yellow Queen Angelfish head out in search of their morning meal. As you look past the brightly colored large fish, you notice the school of smaller blue chromis flying over the reef like a flowing flock of bluebirds. Looking even closer, you notice the bulging eyes of a tiny blennie peeking at you from a coral. All of a sudden, you notice the flecks of “dust” around you are actually swimming animals. The world around you is a whirl of activity.

And this underwater world is noisy! The most noticeable sound is the Darth Vader-like sound of your own breathing. Then you hear the sound of the bubbles as they are released from your regulator. As you listen more closely, there are clicks and clacks as the fish bite off pieces of sponge and coral. Loud crunches come from the coral next to you as a parrotfish uses his strong jaws to snack on the reef. The unmistakable “croak” of the endemic Splendid Toadfish is heard from below. The distinctively striped face of Splendid Toadfish can be seen peeking out from under a rock below. If you are lucky, you may get to see the bright splash of yellow trim on its pectoral fins and along its back. There is a new adventure around every coral head.

Cozumel has over 40 reefs to choose from, with something for every experience level. Beginning divers can explore the shallower, lightly flowing reefs of Cedar Pass or Yucab, while more experienced divers can head to the deeper waters of Devil’s Throat.





Divers can ride the faster currents in the deep southern reefs like Maricaibo, or those in the northern end of the island like Eagle Ray Alley and San Juan. Adventure can be found all along its western coastline, within an easy boat ride from most resorts and hotels.

The Palancar reef system is definitely one for the bucket list. It is a 3.5 mile long system made of several different reef formations. Diving depths can range from 50 feet to 115 feet. In some areas, the reef system is so close to the surface, snorkelers can be seen overhead enjoying the reef below. Palancar Pinnacles are long towers reaching up from below, perfect for divers to weave through, often meeting a cruising sea turtle or eagle ray flying in the current. Palancar Caves are beautiful “swim throughs”, becoming doorways to hidden coral rooms. Palancar Gardens allow you to float along beautiful formations of colorful coral for what seems like miles in relaxing observation of the life around you.

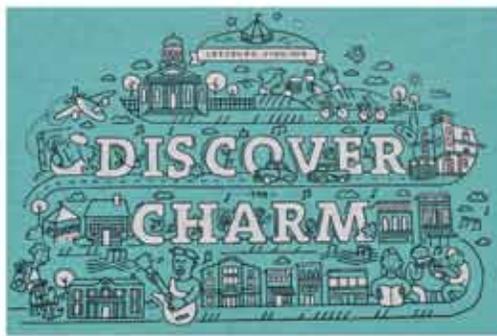


COZUMEL Q. ROO. MEX.



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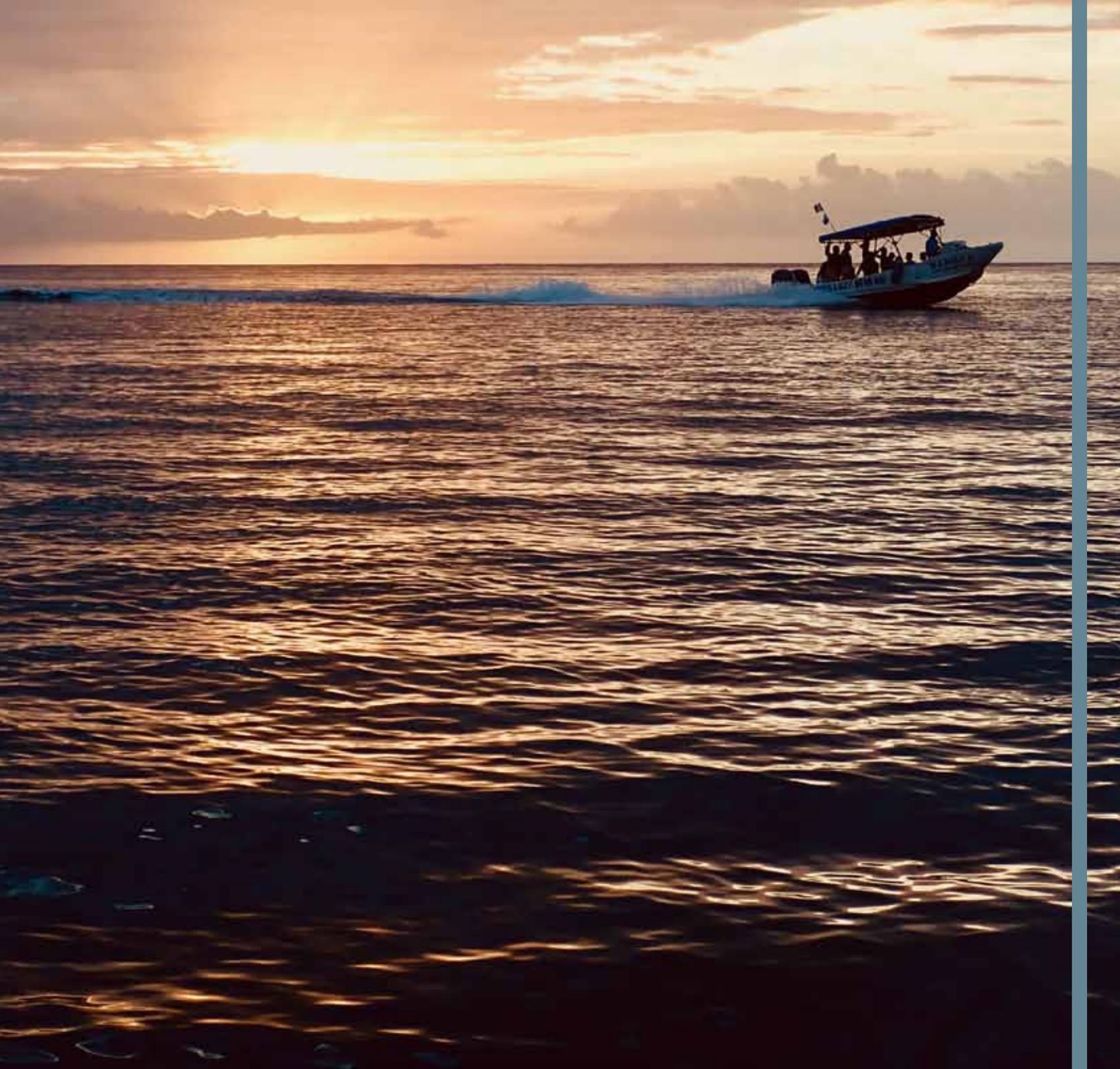


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While Cozumel is not known for wreck diving, it does provide the Felipe Xicotancatl, otherwise known as the C53. The Mexican Navy bought the minesweeper in 1962 to convert it into an Admiral-class gunboat. The C53 patrolled the Gulf of Mexico for 37 years. During that time, it fought against the illegal drugs and weapons smuggling, and it participated in rescue missions as well. After it was finally decommissioned in 1999, the Felipe Xicotancatl C-53 was sent to Caribbean Sea seabed. Chankanaab Park was chosen for its final resting place due to its easy access to divers and its great sand barrier to protect the corals in the area.





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Underwater adventure doesn't stop when the sun goes down. Night dives can provide some of the most unique experiences underwater. As the sun sets, the activity underwater changes. The fish who spent the day searching for food, back into a sheltered spot to rest for the night. Giant crabs appear out of their daytime hiding places, using their long legs to scamper over the rocks in search of dinner. Suddenly, a piece of pink coral begins to move along the rock! As you look closer, a Decorator Crab shows his legs from under the coral it had attached to its shell. Caribbean octopus are on the hunt, often creating a turquoise parachute over a coral head, trapping the fish inside its flexible body. Paradise Reef and Chankanaab Reef are ideal for the night dives because of their slow drifting current and close proximity to the marina.

All divers must eventually come up for air, but there is still plenty adventure on the Island of Cozumel. El Centro (downtown) is a great place to find a bench and people watch. In the early morning, head to the COZ Coffee Roasting Company for their famous peanut butter coffee, hot or iced and a smoothie bowl. The early risers can be seen out for a morning run, a quick ride around the island or walking their dogs. Shopkeepers arrive and open their tiendas for the incoming cruise ship visitors and the area begins to buzz.





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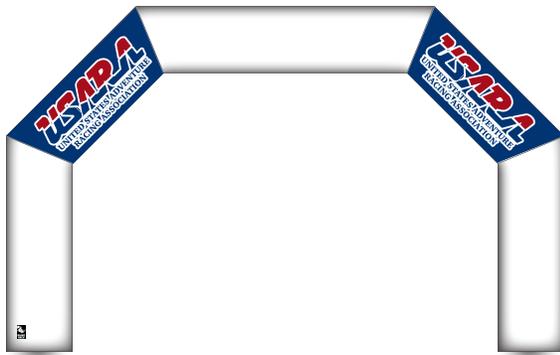


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Get premium features for an affordable price – why pay double?

Action cameras have come a long way since they first appeared on the market. Designed for the demands of the great outdoors, they have been keenly adopted by a wide range of

outward-bound enthusiasts who like nothing more than seeking a rush of adrenaline in their free time, whether they get it from mountain biking, climbing, cycling, snowboarding, surfing...the only limit is their

imagination! So it's great to know that in a crowded marketplace where there is a seemingly bewildering amount of choice, one leading manufacturer is offering a premium product for an affordable price. And

here's the question: why pay double the price when you can get everything you need and more in an AKASO action camera?

The AKASO difference
AKASO may be a relative newcomer to the action camera sector but in less than five years it has become one of the leading action brands on the worldwide market, with annual sales of more than 500,000 units. By buying an AKASO action camera you're also joining an established community of

outdoor enthusiasts and content creators, and thanks to a partnership between AKASO and Leave No Trace you're doing your bit for the environment, too.

Special edition marks AKASO's Leave No Trace partnership

The Leave No Trace Center for Outdoor Ethics protects the outdoors by teaching and inspiring people to enjoy it responsibly. Founded in 1994, Leave No Trace strives to minimise the impact that humans make on the natural world, and is active in over 90 countries around the globe. AKASO has partnered with Leave No Trace to launch a special edition of its V50 Pro action camera – a portion of every sale of the V50 Pro SE will go directly to support the Leave No Trace Access Fund. It's a great cause to support, and will help preserve our environment for future generations. ●



World-famous rock climber Tommy Caldwell is an AKASO action camera ambassador

“A portion of every V50 Pro SE sale will go to support the Leave No Trace Access Fund”



Find out more about the AKASO V50 Pro SE action camera at: www.akasotech.com

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Located around the central clock tower in downtown San Miguel is a collection of restaurants, shops and live music venues. Families gather in the evenings and children and tourists often cool off in the water feature in the center. On the square, Woody's is a great place to stop for a giant margarita and talented acoustic musicians. Be forewarned, you may need a friend to help you finish your drink! While there, visit their neighbor, Sergio's Silver from Taxco to meet the 4th generation jewelry craftsman and his family. Sergio will share his wide variety of original designs, and he is open to creating something just for you. When you get hungry again, head over to Casa Denis for some authentic Mexican food.

Interested in a little history excursion? San Gervasio Mayan Archaeological Site is worth the visit. You can pay for a guide, or choose to read the descriptions on your own. In the heat of summer, be sure to go early. While not as famous as Chichén Itzá, you can still learn a lot about the ancient Mayan culture in the area.

If you are seeking adventure away from the crowds, you can rent a car or motorbike, or even a bicycle and explore the roads around the island. There are plenty of places to stop along the way, like Coconuts or Mezcalitos for a snack and a great view along the beach.





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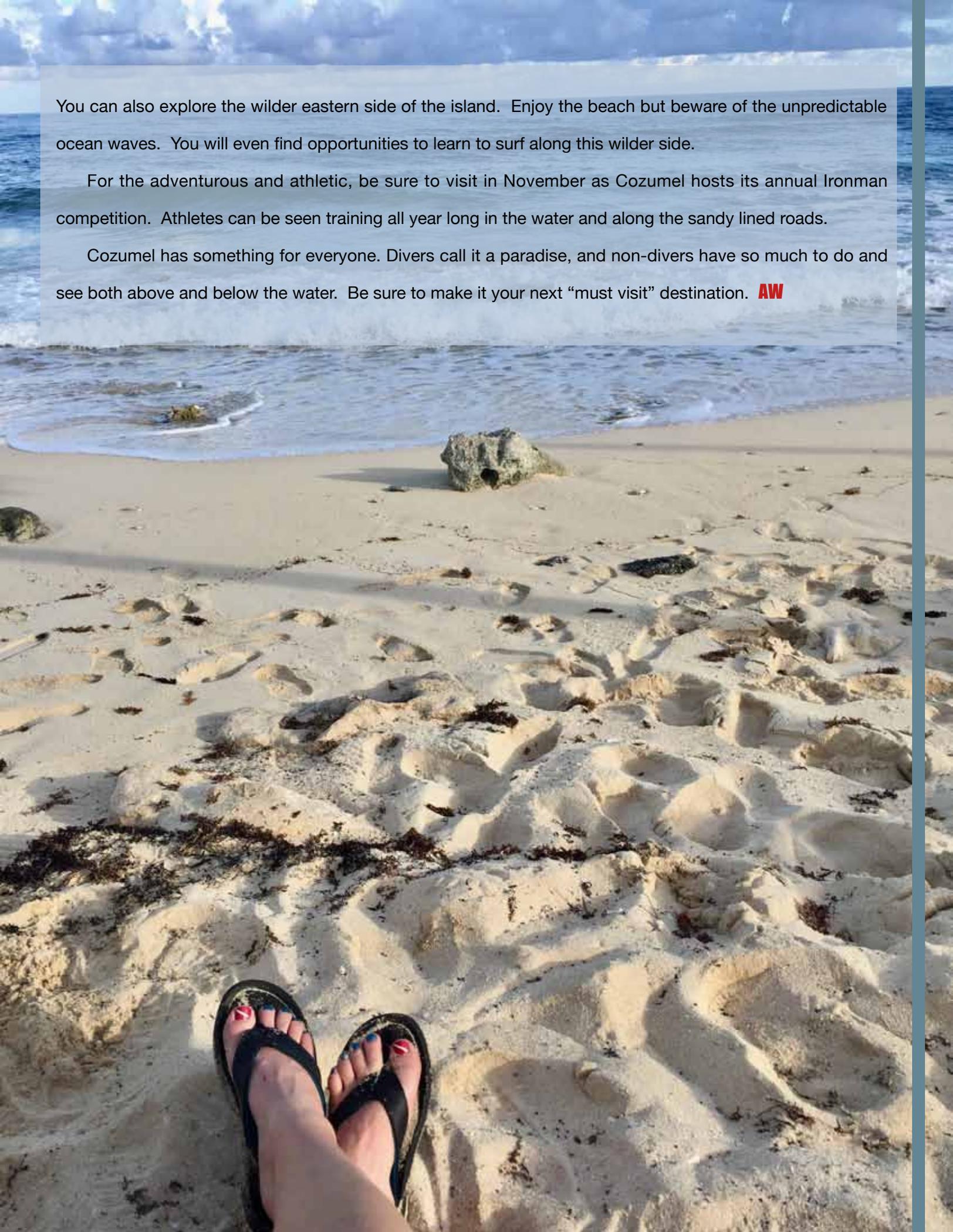


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You can also explore the wilder eastern side of the island. Enjoy the beach but beware of the unpredictable ocean waves. You will even find opportunities to learn to surf along this wilder side.

For the adventurous and athletic, be sure to visit in November as Cozumel hosts its annual Ironman competition. Athletes can be seen training all year long in the water and along the sandy lined roads.

Cozumel has something for everyone. Divers call it a paradise, and non-divers have so much to do and see both above and below the water. Be sure to make it your next “must visit” destination. **AW**



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GRAVEL GRINDER RACE DAY CHECKLIST

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- CPSC Certified Helmet
- Wicking Jersey
- Bike Shoes
- Bike Shorts
- Bike Socks
- Bike Gloves
- Rain Jacket
- Buff/Bandana/Skullcap
- Arm/Leg Warmers
- Shoe Covers or Waterproof Oversocks
- Sunglasses or Clear Lenses
- Water Bottles or Hydration Pack
- Drop Bag
- Performance Food/Gels/Drinks
- Cycling Computer / GPS
- Heart Rate Monitor
- Saddle or Handlebar Bag
- Headlight
- Taillight
- Floor Pump & Accurate Pressure Gauge
- Chain Lubricant
- Tire Plug, Spare Tube or Patch Kit
- Compact Pump or Co2
- Tire Levers

- Cycling Multi-Tool with Chain Tool
- Quick Chain Link
- Extra Derailleur Hanger
- Extra eTap or Di2 Battery
- Insurance Card
- Photo ID / Membership Card
- Body Glide
- Sunscreen
- Lip Balm
- Insect Repellent
- Towel
- Wet Wipes
- Toilet Paper
- Food/Snacks/Drinks
- Camera
- Cell Phone
- Cash/Credit Card
- First Aid Kit
- Extra Clothes
- Camp Chair

This list will insure you do not forget any key components for your next gravel grinder race or adventure.

KAE TAKESHITA BODY GLIDE PRO TIP

Kae is originally from Japan and has been riding and racing gravel since 2014, achieving a #1 female ranking from PureGravel.com. Kae has wins at Gravel Worlds, Barry Roubaix, Texas Chaining Massacre and the Epic with multiple podium finishes at Unbound Gravel (formerly DK200) and The MidSouth (formerly LR100).

It sounds basic but it is important to make sure your bike is in a perfect waiting condition. You don't want to be adjusting your bike in the middle of a ride or a race. Brakes working? Chain is clean and lubed? Tires have enough sealant? Tubeless set-up won't work very well, in case of a flat, if the sealant is dried up. Tires have proper pressure? Is the Co2 cartridge actually full and not partially used. Are all batteries charged (shifting, lights, GPS unit, etc).



Pulsar Heats Up Thermal And Night Vision Competition with 2022 Releases

by Kevin Reese

IMAGE. QUALITY. While the tagline is foundational to Pulsar’s efforts, it’s not a catch-all. Equally as important are Pulsar’s focus on emerging technologies, product development, design innovations, all while walking on the leading edge of the thermal and night vision industry. Pulsar Chief Marketing Officer, Liudas Abisala, underscores these truths with the company’s commitment. “We pride ourselves in being the innovation leaders in civilian thermal vision technology.”

Abisala emphasizes Pulsar’s current state and ongoing pursuit of industry-leading innovations with more choice words, stating, “Our status is constantly confirmed by the number of attempts to copy our product designs, features and even our communications.” He adds, “The benefit is simply that constantly pushing ourselves keeps us focused on research, development and implementation of the newest technologies, as well as end-user focused solutions. Once again, for 2022, Pulsar is proud to introduce a long list of new devices to widen the gap between Pulsar and our competitors.”

That said, Pulsar leaps ahead in 2022 with a handful of advanced thermal and night vision products well worth the industry buzz at SHOT Show and well into the calendar year. Beginning with a common theme throughout Pulsar’s new lineup, internal and external battery life has been extended via more efficient processing.



Digex C50 Digital Riflescope

Jumping into the 24-hour digital riflescope game, the Digex C50 Digital Riflescope employs a HD 1928x1088 sensor resolution, a 1024x768 HD AMOLED display and 1024x768 photo/video resolution for pristine full-color HD daytime and ultra-crisp digital night vision imaging courtesy of an FHD CMOS sensor. Additional Digex C50 Digital Riflescope features include built-in video with audio, 16 gb media file storage in .jpg and .mp4 formats, Stream Vision 2 app compatible Wi-Fi and Bluetooth connectivity, 3.5 – 14x magnification and up to 10 hours of battery life from dual Li-ion mini power system. The Digex C50 is available with 940S and 850S IR illuminators and detection ranges reach 550 and 600 yards, respectively.



Krypton FXG50 and Photon FXQ30 Clip-On Thermal Optics

Designed to attach on the forward end of daytime riflescope, Krypton and Photon clip-on thermal devices add thermal imaging to your traditional optic, eliminating the need to switch scopes. Krypton is Pulsar's flagship clip-on device and boasts 640x480 sensor resolution with a 12-micron pixel pitch while the Photon clip-on thermal utilizes 384x288 sensor resolution and a 17-micron pixel pitch. The Krypton FXG50 also boasts a 1746x1000 HD AMOLED display, <50 NETD sensitivity and up to 10 hours of battery life. The Photon FXQ30 features 1024x768 HD AMOLED display, <40 NETD sensitivity and up to 6 hours of battery life. Both models include built-in video, 16 gb of internal media storage in .jpg and .mp4 formats.



Thermion 2 LRF XP50 Pro

Many have hoped and few may even have suspected. If you have held out on Thermion thermal riflescopes because your Trail features LRF, the wait is over. Pulsar's latest, greatest flagship Thermion 2 thermal riflescope boasts an integrated laser rangefinder, accurate to within +/- 1 yard, out to nearly 900 yards; adult-size heat-signature detection range up to 2000 yards; <25 mK NETD sensor; 1024x768 HD AMOLED display; full 8-color display palette; 640x480 microbolometer sensor resolution; 17-micron pixel pitch; 50mm enhanced F1.0 germanium objective lens and 2 – 16x magnification. The IPX7 waterproof-rated Thermion 2 LRF XP50 Pro also includes onboard video with audio; 16-gigabyte onboard media file storage in .jpg and .mp4 formats; internal and external rechargeable Li-ion batteries; Stream Vision 2 compatible Wi-Fi to use your personal smartphone or tablet as a remote, secondary display, stream content, transfer media files and update firmware; multiple user identification modes; storage for 5 rifle profiles with 10 distances each and up to 10 hours of battery life (with video-out off).



Axion XQ35 and LRF XQ35 Thermal Monoculars

A perfect choice for discriminating thermal monocular users with a penchant for compact systems, the Axion XQ35 provides crisp image resolution courtesy of a <40mK NETD sensor and 384x288 resolution. The Axion XQ35's 640x480 display resolution and 1400+ yard heat-signature detection range further enhance your field of view. The Axion LRF XQ35 also boasts rangefinding capability out to 1,100 yards (+/- 1 yard). Both LRF and non-LRF Axion XQ35 models include built-in photo and video with 16 gb of media file storage in .jpg and .mp4 formats, stream Vision 2 app compatible Wi-Fi, Bluetooth connectivity, enhanced F1.0 germanium glass, up to 9 hours of battery life, 2x magnification with 2-8x digital zoom and IPX7 waterproof construction.



Learn more about Pulsar's diverse, industry-leading line of thermal and night vision optics by visiting www.PulsarNv.com. **AW**



by Troy Farrar

Mantis X10 Elite Shooting Performance System

The Mantis X10 Elite Shooting Performance System will dramatically improve your shooting fundamentals, making you a more accurate and consistent shooter. The quick detach system allows you to mount the X10 to standard accessory rails and Mantis even has adapters for mounting if you do not have picatinny rails on your firearm. The system can be used to analyze your tendencies for pistols, rifles, shotguns and archery. The X10 works with dry fire, live fire, airsoft/CO2, and simulated firearm systems, collecting thousands of data points per second and analyzing your shooting in real-time.



Install the smartphone app and connect the Mantis X10 Elite to the accessory rail of any firearm, pair the device and start shooting. The X10 will evaluate your shooting performance, identify areas that need improvement, track your progress over time and provide suggestions for improvement.

The X10 will track the movement of your handgun's barrel during the trigger pull and your shots are grouped according to movement pattern similarity with each shot being scored depending on how much you moved away from your sighted position during the trigger pull. The app provides a detailed analysis of the entire process from hold and sighting, the trigger pull, shot breaking and recoil patterns. The Mantis app will analyze your trends and provide you with suggestions and coaching tips that help improve your shooting mechanics throughout the entire process.

Perfect for any shooter from beginner to expert marksman, the app has a ton of fun and useful exercises. Choose from a large variety of training drills, guided courses and modes designed to help you practice fundamental marksmanship drills, speed drills, reaction time drills and reloading drills with real time analysis of your results. Analyze the consistency of each component of your shooting movement from holster draw, trigger pull, muzzle trace and recoil patterns. Measure your accuracy on multiple targets, moving targets, while shooting on the move, using rapid fire and under the pressure of a shot timer.



The X10 app will provide daily shooting challenges all designed to make you a better marksman while storing a historical data base of your results. The system even has audio feedback so you can keep your eyes focused on the target during training. You can train with groups and compare shooting data, customize your program, track performance by individual firearm and keep a historic record of all of your training sessions.

The Mantis X10 training tool is used by all branches of the armed forces and recommended by professional shooting instructors to improve your shooting proficiency. Master critical fundamental shooting skills while having fun at the range. The X10 includes a custom carrying case, the X10 Elite sensor, a USB charging cable and a BR7 barrel mount picatinny rail for rifles and shotguns that do not have a picatinny rail. Mantis provides software support for pistol, rifle, shotgun and archery with free monthly app updates. What are you waiting for? Get yourself a Mantis X10 Elite Shooting Performance System and train your way to improved accuracy and consistency in just about any phase of marksmanship you can imagine. www.mantisx.com **AW**





Hexmag Carbon Fiber AR-15 Magazine

Hexmag has a new lightweight carbon fiber AR-15 Magazine in their lineup. The secret is the Carbon Senthex Advanced Carbon Fiber polymer which forms the body of the magazine and reduces weight by 20%. The magazine also features a deep catch pocket, ribbed grip on the front and back of the mag, a heat-treated, stainless-steel spring which resists corrosion and can be loaded for extended periods of time without fatiguing. The carbon Hexmag also features the easy tool less floorplate removal, HexID color customization of the followers and the well known hex pattern which provides grip and allows the user to customize their magazines with designs or even grip tape. Available in black 10, 15 and 30 round magazines, the Sentry Tactical Hexmag Carbon Fiber AR-15 Magazine is a triple threat combining a light weight, rigid and ultra-tough magazine that is backed by a lifetime guarantee. www.sentrytactical.com

Rattlesnake Tactical RT15 Poly Complete Lower

The Rattlesnake Tactical RT15 Poly Complete Lower is a lightweight reliable bargain that is compatible with all mil spec components. The lower comes equipped with a polymer trigger group and safety, an integrated oversized trigger guard, a polymer buffer tube and a collapsible 6-position stock. The tough and durable polymer lower is water resistant and can withstand extreme conditions while shaving tons of weight which is perfect for those long treks in the wilderness. The multi caliber Rattlesnake Tactical RT15 comes with a 3-year warranty and will provide the perfect base for your next Ar-15 build. So grab your favorite upper, slip it on the Rattlesnake Tactical RT15 and get to shooting. www.ammunitiondepot.com



Sentry Tactical Pistol Double Mag Pouch

The Sentry Tactical Pistol Double Mag Pouch is a compact, slim, lightweight pouch that is built to last a lifetime. The pouch is made from multiple layers of high strength, laser cut nylon laminate that will not fray over time. Magazines are held firmly in place with an elastic strap that can be moved out of the way rapidly by using the sewn tabs. The back of the pouch has 3 mounting options: slots for MOLLE / PALS attachment, integrated laminate straps or direct to tactical belt via belt slots which can be configured in both vertical and horizontal orientations. The front of the pouch features the 1080-2 mounting system, which gives the user 4 stronger than MOLLE webbing like slits for mounting other pouches or gear without the bulky weight added by MOLLE webbing. Available in 9mm/.40 or 10mm/.45 the pouch comes in black, tan or cammo. The Sentry Tactical Pistol Double Mag Pouch is a stout little pouch that will get the job done in the toughest conditions. www.sentrytactical.com **AW**



MOA



TARGETS

MOATARGETS.COM

DIY TWOFER

We “warmed up” our welding skills with a few DIY Twofer targets. You can buy them welded or simply slide the target into the base and weld them yourself. The Twofer target is a 1.5 inch diameter knockdown target (circles, triangles or squares) with an integrated 1x2 inch base, completely constructed of 3/8” AR500. The Twofer can take magnum pistol rounds at 12 yards and service rifle rounds at 100 yards. The Twofer targets are light and fly well, so you may want to paint them a bright color to help you find them. At 150 yards, the Twofer is a one MOA target and at 200 yards, it is a 3/4 MOA target. These little targets are lots of fun and very forgiving even if you are a beginner welder.

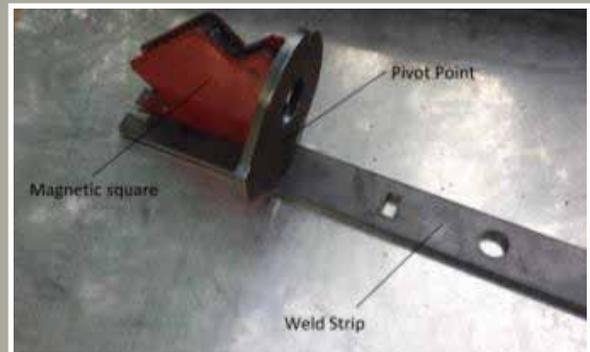


DIY Dueling Tree

We decided to have some fun by building a MOA Targets Dueling Tree. The first things we noticed is that the dueling tree pivots are made from AR steel, which prevent the hardened AR400 paddles from galling the pivots over time. The hardened steel pivots also make it virtually impossible to hurt the mechanism even if you shoot it in the wrong place, because there is a lot of AR steel to go through before you can damage the target. The dueling tree also features strong monolithic (1 piece) paddles that have not been weakened by welding. All this adds up to a dueling tree that will last a very long time. MOA provided all of the main component for our dueling tree, except for the angle and channel iron, and a very easy to follow instruction manual with images.

Step One:

Insert each Pivot Point tab (four total per DIY Weld Strip) into the corresponding rectangular cutouts in the Weld Strip to make sure they fit. Now that you know they all fit, get your 1st Pivot Point ready to weld. Make sure that the Pivot Point and Weld Strip are “squared” with one another, use a magnetic square to help hold them in place.



Step Two:

Once the 1st Pivot Point and Weld Strip are square, tack weld the two pieces together.



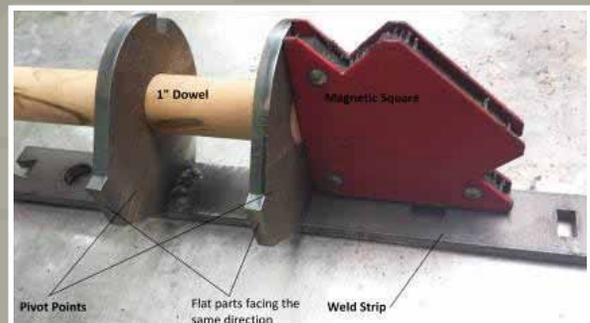
Step Three:

Remove the magnetic square and proceed to weld the piece fully on both sides.



Step Four:

After the first Pivot Point is welded to the Weld Strip, use a one-inch dowel or pipe to align the 1st and 2nd Pivot Point holes. Make sure that the flat part of the Pivot Points are facing the same direction.



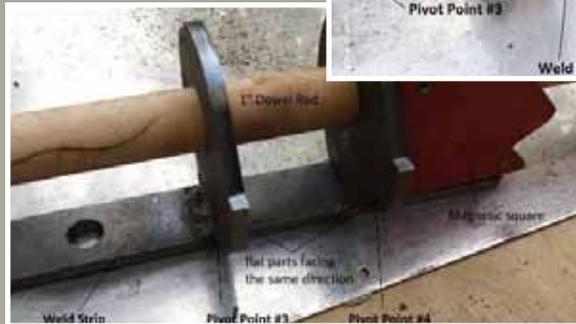
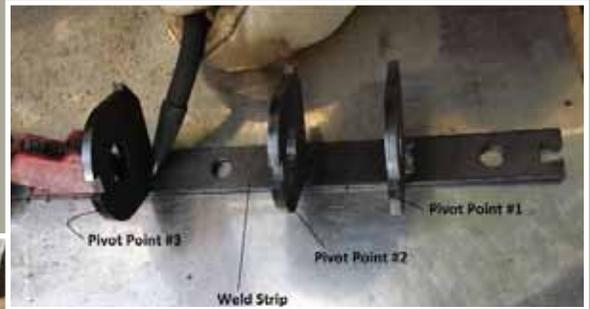
Step Five:

Tack the 2nd Pivot Point to the Weld strip. Once the 2nd Pivot point is tacked into place remove the magnetic square and dowel and weld both sides of the 2nd Pivot Point to the Weld Strip.



Step Six:

Repeat the above steps for the 3rd and 4th Pivot Points. Make sure that the flat part of the Pivot Points are facing the same direction and continue to use a one-inch dowel or pipe to align all of the Pivot Point holes.



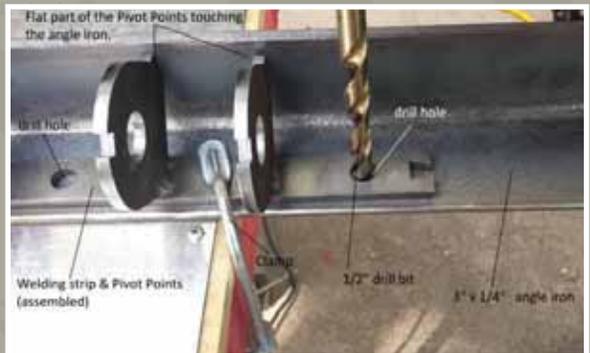
Step Seven:

Check your alignment using the one-inch dowel or pipe. Depending on how well you did, you may have to relieve the strip and or beat some pivot points into alignment. Each Weld Strip will hold 2 paddles, so if you want 6 paddles you will need to make 3 weld strips.



Step Eight:

Now that all of the Pivot Points are welded to the Weld Strips you can attach the Weld Strips to your Angle Iron. Clamp the assembled Weld Strip and Pivot Points to the inside of the angle iron in the desired location. Make sure that the flat parts (opposite of weld strip) of the Pivot Points are touching the inside of the angle iron. Once clamped use a 1/2 inch metal drill bit to drill a hole through the angle iron where each of the round mounting holes are located on the weld strip - a pilot hole is recommended. Stepping the mounting hole up to 5/8 inch will allow flush setting of a carriage bolt from the shooting side. Use a lubricating oil to make the drilling process easier and protect your drill bit. You can also cut the holes with a cutting torch and then use a reamer to get them the correct size.



Step Ten:

Once all 3 holes are drilled, bolt the assembled Weld Strip and Pivot Points to the angle iron.



Step Eleven:

Building a base: Weld a 36 inch long piece of angle iron to the upright angle iron and drill 2 holes for bolting to the legs.



Step Twelve:

Cut 2 pieces of 30 inch long channel iron and drill holes for bolting to upright and for staking to ground.



Step Thirteen:

Bolt the legs to the upright.



Step Fourteen:

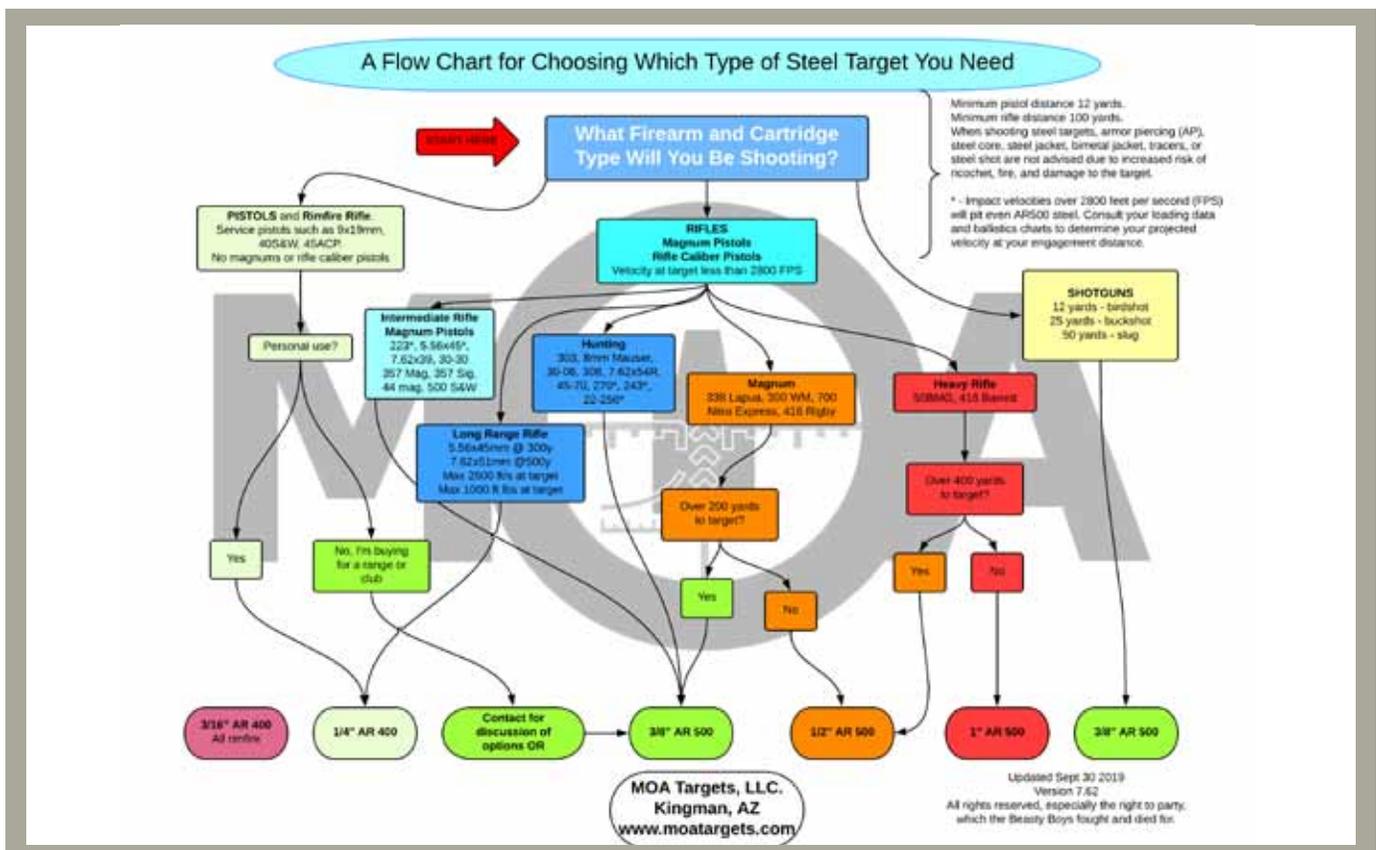
Paint the paddles and start practicing on your new MOA Dueling Tree!



MOA Targets was founded by Mitch Gerlinger in March of 2013 with a unique twist – they have a commitment to high quality steel targets geared towards the do-it-yourselfer. Many MOA targets and stands that require welding are available as a DIY weld kit or as a completed product. The weld kits are fun and allow the end user to either weld the target up themselves, or have a local shop or buddy do the welding for them. Weld kits save money because locally available parts, such as angle iron, are eliminated, and you don't have to pay MOA to do the welding. Additionally, many DIY setups ship cheaper as weld kits, due to reduced dimensions.

All MOA Target surfaces are made from AR 500 or AR400 steel, with mill certificates available on request. MOA uses a high definition, CNC controlled 12Kn fiber laser to cut their targets. Why is this important, you ask? Laser cutting results in a minimized heat soak or Heat Affected Zone (HAZ) typically less than 1/32", as opposed to the 1/4" to 1/2" HAZ that is the result of typical plasma or oxy-acetylene cutting. Water-jet and plasma-underwater have a similar HAZ to laser cutting due to the cooled cutting method they employ. Laser cutting limits the amount of heating, therefore not annealing (weakening) as much of the target as plasma or OA cutting methods. MOA's laser can cut at a staggering 200 inches per minute making the HAZ on MOA's targets almost non-existent. As further protection, MOA uses bolts and never welds, on target surfaces to protect them from the heat. Finally, the laser provides super clean and crisp edges on the target cuts and clean square cut holes for hanging the targets with carriage bolts. What this means is that MOA targets are super strong, monolithic (one piece) targets that have almost non-existent HAZ from the cutting / manufacturing process. On their dueling tree, the pivots are even made from AR steel to keep the hardened paddles from galling the pivots over time. They like to say, "Here at MOA, we'd rather have steel cut with a freaking laser than water anyhow" and we wholeheartedly agree!

Here is a handy flow chart that MOA produced to help you understand which type of AR steel and what thickness of steel target you need for your desired type of shooting. If you are not sure, just give MOA a call.



MOA Targets is a company run by a shooter, for shooters; the result is every MOA target is designed for a long service life. MOA is also committed to over testing their targets to insure reliability. For example, a target designed for a 308 is tested with a 300 Win Mag, MOA even tested a pistol target with a tommy gun. MOA has a large selection of awesome targets and they can create custom work as large as 10' x 40'. MOA Targets are super strong, well designed, over tested brutes that will last a very long time. **AW**