

ISSUE 02 - 2021

THE MOUNTAINS MAGAZINE

L E B A N O N

«IT IS NOT THE MOUNTAIN WE CONQUER
BUT OURSELVES».

- Edmund Hillary

EXPEDITIONS
EVEREST, LEBANON & MORE

RESERVES & TRAILS
BOUKAAT LOUBNAN

MORE THAN
18 ARTICLES

TIPS & TRICKS
PHYSICAL & MENTAL PREPARATION
MOUNTAIN LAB

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E The mountains teach us that no matter how hard the climb is, what is waiting for us at the top is worth every drop of sweat, every tear and every struggle.

The trees encourage us to embrace change, letting go of the dead with every fall, preparing for change with every spring, thriving energy and radiance with every summer, and enduring harsh and difficult conditions with every winter.

The sky reminds us that after every storm, no matter how hard it can get, there will be better days ahead.

The deep waters show us that there's more to life than the eyes can see, encouraging us to search deeper to find life's true meaning.

The vast meadows of flowers, the birds, the ant colonies, the wildlife, the wind, the snow, the sun...are all proof of how majestic and wonderful Mother nature is!

We can go on and on about how many life lessons we can extract from nature, along with its beauty and the serenity one feels when spending some time in its arms and more seriously, its importance for life's continuity. With that being said, we as a Mountains Magazine would like to underline the importance of nature, and how we as a community have a duty to protect and serve it. No it is not too late, no we should not ignore it, excusing ourselves by saying there are more important issues to face nowadays. This is our message this year, protect nature, protect our future!

On another note, we would like to take the time to thank our sponsor "Life Happens Outdoor" along with its founders for making it possible once again to publish the second edition of the Mountains Magazine Lebanon. Also, thank you for everyone who filled the Magazine's pages with interesting and diversified articles. Last but not least, we would like to thank ourselves, Spyro, Mario, Roy and Mira for not giving up despite all the bad times we are living in Lebanon and for finding the time in our chaotic lives to keep this dream going!

E Happy reading!



Mira Sabbagh, Editor in chief



Roy Nader, Trails & Outdoor activities expert



Mario Fares, Training & conditioning specialist



Spyro Klitira, Public relations & Photography

DEAR MOUNTAIN DWELLER

Our community is growing.

Our achievements are getting noticed, and proof of what we can do together collectively in support of one another cannot be more obvious.

From our two record-breaking runs of the Lebanon Mountain Trail in under one year, initiatives that brought together dozens of runners, trekkers, climbers and well-wishers, to the youngest Arab on the summit of Mt. Everest, these little mountains of ours on the shores of the Eastern Mediterranean are not just producing greatness but are reviving a forgotten truth of high-altitude exploration: That we may go fast alone, but we most certainly go further, higher and better in support of one another.

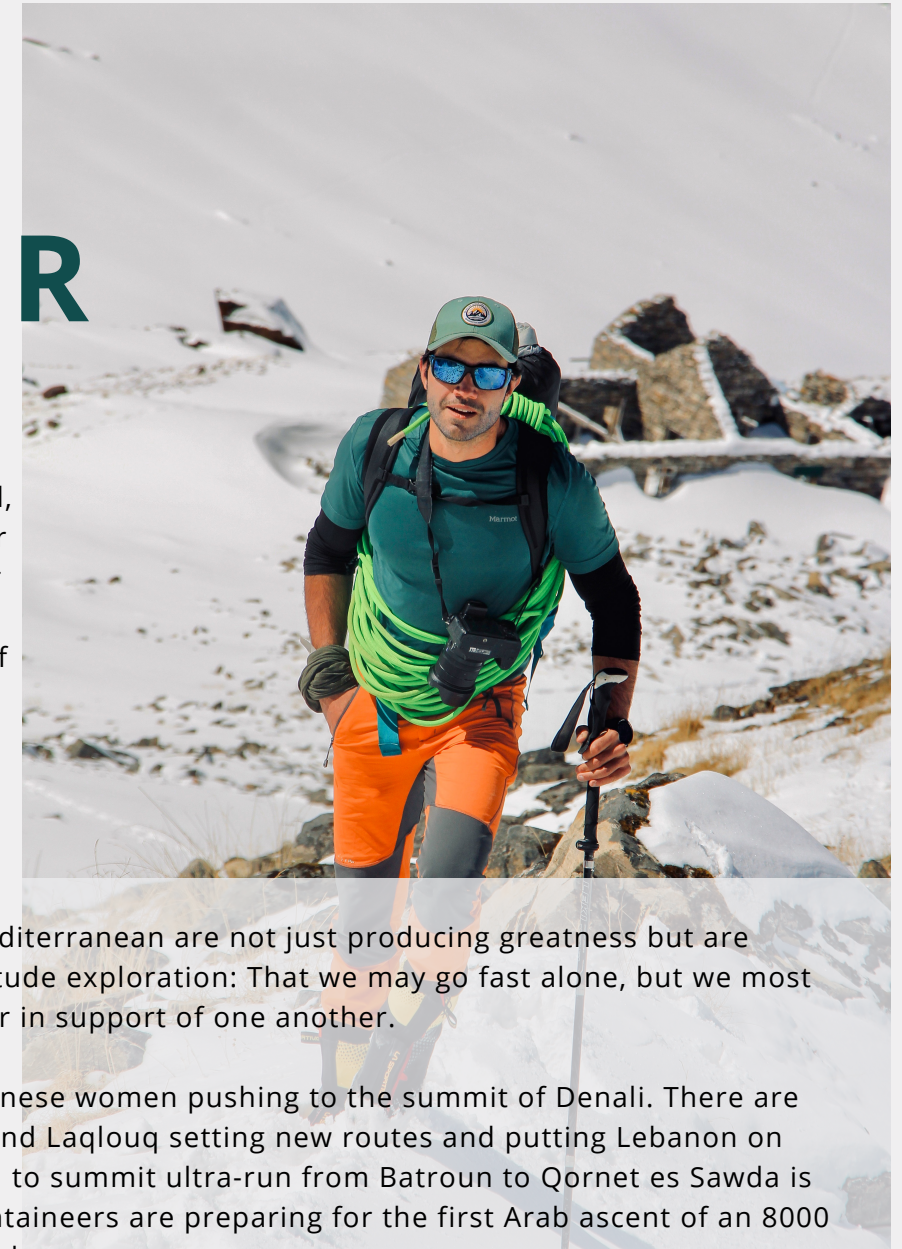
As I write these words there are Lebanese women pushing to the summit of Denali. There are teams in Tannourine, Bisri, Ain Trez and Laqlouq setting new routes and putting Lebanon on the global climbing map. The first sea to summit ultra-run from Batroun to Qornet es Sawda is being achieved and 2 Lebanese mountaineers are preparing for the first Arab ascent of an 8000 meter mountain without supplemental oxygen.

I couldn't be prouder of what this community and this magazine have accomplished in such a short space of time, but we still have pitches to climb and glaciers to traverse. That's why I'd like to use the opening remarks of this second addition of the Lebanon Mountains Magazine to address my fellow Lebanese mountaineers and adventurers directly.

We are a small nation in our region and indeed in the world, but our footprints on the summits of our planet far outmatch our size. Our mountain legacy is something that we should all be proud of and look to as a source of inspiration for the next chapter in our story. That chapter will be written by you. You get to decide whether Lebanon will be represented at the base camps of the world by squabbling infants elbowing each other to reach the top first or by pioneering mountaineers, climbers and adventurers who support one another and achieve greatness together. You get to decide whether our community will sit ideally on past achievements or use those achievements as the starting point for the next great accomplishments.

You are the custodians of this community and you are responsible for where it goes from here.

Rami Rasamny, Life Happens Outdoors



EXPEDITIONS IN LEBANON & ABROAD

EVEREST CLIMB

Rawan Dakik,

the 21 year old Lebanese/Tanzanian mountaineer made it to the summit of Mt Everest on May 23rd 2021, making this achievement the 6th out of 7 in her quest to complete the 7 summits challenge with Mt Denali left to climb (highest peak in North America).

I am proud to have raised the Lebanese flag on top of the world said Rawan, the youngest Lebanese mountaineer to climb Mt Everest.

With more than 22 mountains around the world under her belt, Rawan is now preparing herself to climb Mount Denali, Alaska, the highest peak in North America in order to complete the 7 summits challenge.

The 6 completed summits so far are:

- Kilimanjaro, the highest peak in Africa,
- Elbrus, the highest peak in Europe,
- Carstenz, the highest peak in Oceania,
- Aconcagua the highest peak in South America,
- Vinson the highest peak in the Antarctic continent
- Everest the highest peak in Asia and the world.

The young mountaineer is forever grateful for her family's ever-growing support, and would like to thank her fellow Lebanese mountaineers for their encouragement.



YOU NEVER
REALLY LEAVE
THE MOUNTAINS

come back different



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TETNULDI AGAINST ALL ODDS

Despite everything that is happening in Lebanon, the two mountaineers Lindos Daou and Avedis Kalpaklian had their eyes on one of the majestic peaks of Georgia, Mount Tetnuldi 4858m. It is considered as the third highest of the country in Upper Svaneti in the Central Caucasus Mountains, known as the Mont Blanc of Georgia.

Day 1 started with an approach hike of 11km with 1200m ascent that took roughly 9 hours, while carrying their full gear (tent - food - stove - all clothing layers - climbing gear ...) estimated around 30kg backpacks. They reached Camp 2 / 3700m, and used it as a base camp for their climb.

Day 2 was acclimatization and resting day; they also had the chance to explore the crevassed field surrounding the campsite in preparation for the summit push, but were astonished by the conditions of the Glacier. What should have been a 1.7km of glacier travel in a white field has changed drastically to a treacherous maze of black ice crevasses because of the global warming and climate change.

The head wall itself is now a 200m ice wall of 40 degrees instead of an alpine snowy climb. Here, we would like to clarify that the route picked for the summit is the normal SW ridge that has a difficulty of Russian 2B / Alpine grade PD+!! But because of global warming and climate change, the level of the climb is much harder now: Russian 3B / AD+ or even D!!.

On Day 3, the mountaineers traversed the crevassed field and started scouting the ice-wall and setting the strategy for the climb.

Day 4, consisted of ice climbing practice on the infamous 200m wall with a sheer degree angle, where the mountaineers installed ice screws to secure themselves,

used front-pointing techniques to climb and descend using their crampons. Also, new techniques were used such as the Abalakov system for rappelling over some parts of the crevasses and bergschrunds throughout the steep wall.

Summit Day started at 1:00am to benefit from the low temperatures at night and cross the sun-exposed ridges before it gets too hot and slushy. The mountaineers started navigating around the glaciated crevasse field then climbed seamlessly and smoothly the 200m icy wall, and later crossed the long-exposed shoulder to reach the foot of the Pillow hill at 4300m. Just right after the Pillow hill at 4300m they were faced by an extremely technical rocky ridge that they had to climb carefully with their crampons on, while taking extreme attention to loose rocks.

Then, they reached the summit ridge that extended to almost 2 km and was very steep, narrow, and exposed in various sections. The temperature was starting to rise, and the climbers had to reach the summit before it becomes too dangerous. Thus, they caught their breath, increased their pace and managed to successfully reach the peak of Tetnuldi 4858m at 9:22am while raising the Lebanese flag and the Red cross Flag. The return to the lower part was under the heat, the snow was slushy but with extreme care and vigilance, the climbers reached their base camp safely after 17 hours and 38 minutes of a daring climb to one of the most prestigious mountains in the Georgian and the Caucasus range.



AVEDIS KALPAKLIAN - TETNULDI SUMMIT, 4858 m



LINDOS DAOU - TETNULDI SUMMIT, 4858 m

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MOON MONKEY

Integrating global sustainable strategies in every step. We've been living some crazy times in the world, (especially us Lebanese). The planet has turned upside down, as we still slowly emerge from a pandemic and dive into endless economic crisis. Months of lockdown and isolation, economic and social instability have triggered some serious reflections on the ways in which the world has been functioning. This made us consider our relation to nature and our place in the world.

As per Moon Monkey, we did change too.

We got the time to dig deeper in knowledge, listen to what the world needs from us at this time and finally be able to define our purpose: we want to make our people and our planet more sustainable, healthier, and happier through every act, and in our case, through trekking and mountain climbing.

During the lockdown, entire communities shut down, the bottom fell out of economic activity, and people struggled to survive.

The planet did better though!

Global Sustainable EcoTourism is so much more than an interesting catchy phrase. It relies on three pillars: *environmental sustainability, social sustainability, and economic sustainability* (sometimes referred to as planet, people, and profits). What we do now in operating our adventure tours, educating our fellows, supporting our communities, will indeed contribute to making a positive difference.

"The Slightly Different Nepal" - which is the trek to Annapurna Basecamp that happened last April- was eventually SO different! We were guiding a group of 6 trekkers to Annapurna Basecamp, and with almost no other tourists along the trail, we had the chance to dig deep, notice what we don't usually get the time or calmness to see in nature itself, and in each other too: **Nature was so unravelling with fewer people, less pollution, and less carbon footprint.** This leaves us wondering: How can we create a harmonious plan for the wellbeing of humans and nature together?

On the environmental level, we experimented with going green in every act, and it's never so complicated to share rooms, turn off air conditioners (whenever in the city), heaters, and other electronic gadgets when we get out.

- We tried **managing our waste** even on a small scale, by separating our organic waste from the recyclable one, keeping it sometimes in our backpacks for days until finding the right bin to throw our waste in.
- Our focus was also on using **less water** especially in the mountains where the conditions make it harder for the locals to collect and heat.

- **We kept reusable bags in our backpacks:** This must be the



By Edwin El Bainou

simplest way to promote sustainable tourism (and reducing plastic waste).

- **We reduced our carbon footprint** -because it's everyone's responsibility by now- by buying, eating, and simply living just like the locals do.

On the socio-cultural level, happiness and health are a collective purpose: Connection with others, noticing, and taking time to learn, and offering acts of kindness to others are things we learned through our treks.

- **Taking care of heritage places is part of our responsibility:** these represent golden knowledge and a legacy that should be transmitted to future generations. Do we really need your name emblazoned on the walls of the beautiful Buddhist pagoda or the sides of the mountain?

- **Respecting the traditions and ethics that the locals live by, is what makes it all new and different:** Being discreet when people are praying in churches, mosques, or temples, and wearing appropriate clothes makes us conscious and well-hosted by everyone!

- **Expressing compassion is also sensitive:** instead of offering sweets and/or money to the kids we encounter during the treks, we started offering them books, toothbrushes, and cookies, so they don't become dependable or feel inferior to the tourist they meet.

On the economical level:

- Circulating money in the local economy: Individuals have different roles, skills, and attitudes, and it's better to bring our diversity all together. Therefore, we always collaborate with local companies, by hiring a local guide, a porter, and staying in humble local owned guesthouses. All that allows the money to circulate in the local economy.

- Supporting community-based tourism and initiatives are also fun: You can't imagine how happy the locals get when we are interested in knowing more about their cultures, without always imposing ours.

Join us in challenging yourself and in experimenting more ways to be healthy to yourselves and to the world we live in. Taking a step beyond our comfort zone each time you take a trip is worthwhile. Capitalist structures push us to live fast, to want more, to buy more than we need, to expend energy rather than to contemplate, to settle to co-exist. Simply, Live with Nature!

Lama Sawma & Edwin El Bainou
Moon Monkey Co-Founder

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LMT

SOUTH TO NORTH



RAMI RASAMNY & AVEDIS KALPAKLIAN

Following the devastating Beirut blast, *Rami Rasamny* and *Avedis Kalpaklian* decided to embark on an initiative to raise 10,000 USD for the relief effort of the *Lebanese Red Cross*. They teamed up and started the long journey on September 1st, 2020, aiming to cross the 470 Km Lebanon Mountain Trail from south (Marjeyoun) to north (Andket) in 8 days. They crossed 76 villages and towns, 5 protected areas, finishing the trail on September 8th, 2020. Along the way, many people including mountaineers, trail runners, hikers from all over Lebanon joined during different days and in different areas to support the team and the cause. In addition, a support team was accompanying them every step of the way, providing food, water, tents and everything they needed. The team was composed of *Ghida Arnaout* (Team coordinator & Mountaineer), *Omar Arnaout*, *Amjad Hijazi*, *Elias Polion* (Trail runner), *Lindos Daou* (Mountaineer), *Stephanie Audi & Christian Akhras* (Lebanon Mountain Trail Association representatives) and *Romy Habre*. During those 8 days, they lodged in many guest houses and they were overwhelmed with the hospitality and kindness they received. The owners of Soha Village & Ehden Adventures offered them a place to sleep, food and everything to make their journey easier. To describe his experience, *Rami G Rasamny* provided the Mountains Magazine Lebanon with a few words: "The most inspiring part of our journey was the way in which our community came together to help us reach our goal. Mountaineers, trekkers, trail runners and friends from all over the country braved the harshest heatwave of the year to join us, on different sections of the trail and brought with them fresh energy and enthusiasm that motivated us to push beyond what we thought we



RAMI & AVEDIS WITH THE SUPPORT TEAM

could. If it wasn't for them I honestly don't think I would have pushed past the first 2 days let alone finish the trail in record time of 7 days 10 hours & 6 minutes (South to North record). The most physically challenging part of the journey was the heat and specifically the day we crossed from Aitanit to Jezzine. Although we reached 1730 meters of altitude, the heatwave bouncing up from Bekaa valley was merciless. It also had a big mental impact because it was only our second day and we were all already toying with the idea of stopping. That day we finished 30 Km behind our intended target. I don't think any of us imagined we'd eventually make up for it." As for *Avedis Kalpaklian*, he commented on this journey with the following words: "what a grueling, outstanding quest that was, combining the feat of running the Lebanon Mountain Trail "LMT" for the 3rd time and raising 10000\$ for the Lebanese Red Cross to support Beirut. Compassion and camaraderie were in the air as many mountaineers and runners joined us to run for Beirut, for our beloved Lebanon especially that there was a noble cause behind it. Every time I run the LMT I get to know the true meaning of Lebanon, the diversity of culture, nature and history. I am also very happy to see that the trail running community grew a lot since my last run in 2016, at last would like to thank everyone who helped us and was there for us along the way, physically and emotionally."

NORTH TO SOUTH

Nayla Cortas & Ali Kedami

set a new record by running the Lebanon Mountain Trail from North to South.

Record time: 6 days and 12 hours covering a distance of 470kms and an elevation gain of 18000ms+/-.

The biggest difficulty was being able to achieve this feat in a team of two.

No well-defined physical training program can prepare you to run 450km, said Nayla.

The most important thing was to have a body ready to undergo repeated efforts and a strong mind to endure the pain, lack of sleep, fatigue and injuries. In general, this can be accomplished through progressively increasing your weekly distance and hours of training while keeping a low intensity. Doing the LMT means running over 72 km every day with 3000 meters of elevation gain with barely 4 hours of sleep per day.

To achieve this record, it took the power of Nayla and the experience and wisdom of Ali.

Nayla's words better describe their experience: "It was an unforgettable ultra journey: mixed feelings of happy moments and moments of despair, strength and weakness, loneliness and warmth, laughs and tears. A lifetime experience to remember forever, and for that I would like to thank:

- Ali Kedami « The One and Only » who gave me the opportunity to be part of this journey.
- Let's run and Pia Nehme who took care of the athletic training all year long. Special thanks to the super Nesrine Leene Njeim for her exceptional help, Hala Atallah, Saad Sabeh Ayoun, Karim Rifai, Team Focus (Carlos Arkhondis, Neda Iliya Stevenson, Toufic Shayboub), Eva-Maria Kahwaji for nutritional tips and diet follow-ups.
- All the crew: TAQA, House of Steep Productions and Patrick Vaughan for the exceptional team work and the care they provided 24/7 in terms of physical, logistical and mental support.



NAYLA & ALI

- Bodylab and Fadi Hallal for the amazing strength training program.
- Body Coach and Lina Abi Chacra for physical therapy support.
- Lebanon Mountain Trail Association (LMTA) and Christian Akhrass.
- Trail runners: George Saado and his team, and last but not least Avedis Kalpaklian for his crucial presence during the hardest parts.



MARJEYOUN, FINISH LINE

ELBRUS CLIMB

Maria Kenaan,

a Lebanese mountaineer, made it to the summit of Mt Elbrus (Russia) 5642m, the highest peak in Europe on June 12, following an 11 hour summit push that started from the base camp at 3700m.

We were very lucky with the weather, said Maria to the Mountains Magazine Lebanon, knowing that it was an early season climb; In addition to that, dealing with an experienced guide made her journey to the top a pleasant and safe one.

“During this climb, I tested my physical and mental endurance and it was an excellent start to higher and more challenging/technical mountains”, Maria added, especially that this was my 3rd mountain after *Mt Ararat* and *Mt Kilimanjaro*.

The Mountains Magazine Lebanon’s family would like to wish Maria the best of luck in her future expeditions!



MARIA KENAAN



MT. ELBRUS

EVERESTING CHALLENGE 2020, LEBANON

Darb el Sama

Georges Saado is a Lebanese mountaineer and trail runner. In an effort to support the “together li Beirut” organization that launched the 19.8 challenge (Distance of Beirut), Saado decided to run uphill “Darb el Sama” 36 times equivalent to 20 000m elevation gain (double the Everest elevation). This achievement is considered to be one of a kind in Lebanon and the Middle east, especially that it requires persistence and great mental and physical fitness.

The challenge took 57 hours, and *Georges* was accompanied with fellow trail runners *Marwan Akl* and *Joseph Iskandar*.



GEORGES SAADO

MARWAN AKL, JOSEPH ISKANDAR & GEORGES SAADO

Mzaar Summit is 8848m for a cause

In an effort to raise money for the *Lebanese Red Cross*, *Avedis Kalpaklian* and *Lindos Daou* teamed up for the “Everesting challenge”. The challenge consisted of ascending a mountain or a hill multiple times, in order to have cumulatively climbed 8848m.

Mzaar-Kfardebian was their destination. The start was on Sunday October 4th at 00:00, and the end was on Monday October 5th at 14:08, with a total time of 38h 8min 58 sec. The ascent exceeded 8848m and 13,000 calories were burned.

Knowing that it was their first time staying awake for that amount of time on the mountains, the lack of sleep they experienced was both a mental and a physical challenge for them.

To help make the days spent on the mountain a little easier, a base camp was organized with a team of nutritionists backing them up with meals,



AVEDIS & LINDOS WITH THE BASE CAMP TEAM

energy bars and electrolytes after every descent, and a team of physiotherapists, taking care of any injury that might occur and also, the mountain rescue unit was accompanying them every step of the way.

It was a non-stop effort for both athletes, who also teamed up in the past for the “Spaghetti mountaineering tour in Switzerland-Italy”, and the “traverse backpacking from the cedars to Ouyoun el Simane- for autism awareness”, and also for the climbs of “Mount Olympus-Greece” and “Jabal el Akhdar-Oman.

PHYSICAL & MENTAL PREPARATION

TRAIL RUNNING

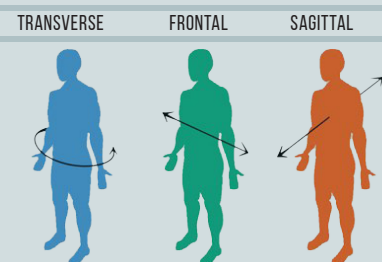
Runners, don't forget the transverse plane.

We live in a three-dimensional world. Our bodies need the ability to move in all three dimensions. By improving three-dimensional movements, you reduce your risk for injury and are more likely to achieve higher performance.

The three planes of motion are the *sagittal*, *frontal* and *transverse* planes.

The *Sagittal Plane* includes all the forward and backward movements, the *Frontal Plane* includes side-to-side movements, while the *Transverse Plane* includes all the rotational movements.

If your goal is performance, never think of muscle groups as isolation, but recognise the integrated movement patterns of the entire body as a single unit. Our bodies consist of various mechanisms which are connected to each other through "sling systems".

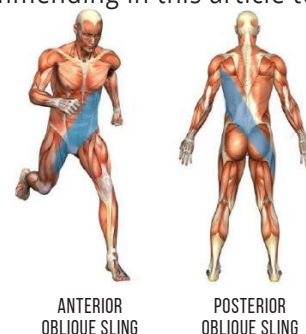


Human biology works contralaterally, if you watch a runner, you will see that he is moving forward, but in fact, his body is rotating. When a runner is moving his leg forward, his contralateral hand is also moving forward with a rotation in the trunk. We function while doing those activities in the transverse plane.

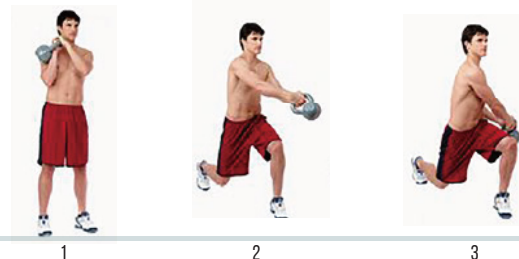
The *Anterior Oblique Sling* runs diagonally in front of the torso. It contributes to accelerating the body but also to rotating and decelerating it during the change of direction.



The *Posterior Oblique Sling* controls the rotation of the pelvis during running and stores energy to create more efficient movements like a spring. Those two slings diagonally link the opposite parts of the torso with the hips and legs. They form an X across the front and the back of the body, and the best way to train them is in the transverse plane. I'm not recommending in this article to neglect the



other plane of motion and the other slings, since they also have a job in controlling your body while running, but I'm recommending to include more the transverse plane in your program. You can add exercises that include some type of rotation or you can modify your sagittal plane exercises to get both planes in one exercise. To make it clearer, think of the normal lunge exercise, you can add a dumbbell chop while performing it, Et voila!



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4 HAPPINESS CHEMICALS ON A MOUNTAIN

Because a mountain is not sunshine and rainbows, but rather the ultimate test of life where you will have to give your 100% every day.

This is not the story of a climb, nor one of a mountaineering expedition. It is a climb of lessons. Lessons that you learn from the mountain.

At every base camp, mountaineers look up at the mountain, picturing their summit day, envisioning the journey on which they are about to embark on. The cold wind filling their lungs with every breath, mixed with the heat coming from inside their soul render their body in an uncomfortable state of imbalance. The murmurs and stories of their colleagues go straight to their subconscious minds, absorbed and rooted in the back of their heads forever. Standing right there, at the base of the mountain makes us vulnerable.

[deep breath]

A deep breath of persistence and determination restores the body's temperature to average, merges the cold wind of our lungs with the pumped-up blood circulation of our body, and we look up at the clear skies, this time not only envisioning the top, but also looking at the mountain.

Vulnerability becomes courage.

As you commence your climb, your body is filled with enthusiasm and excitement, hormones that lead the way for your very first steps. However, mountaineering is not based on enthusiasm and excitement, these will never last, and soon enough you will start feeling the weight of your backpack, slowing back your pace, you will look back at where you started and reconsider every step you make.

Oxytocin kicks in.

Oxytocin is the hormone of trust. Your way forward at this point is through trust. In fact, there are three levels of trust that are built on a mountain:

- The mountain itself: trust in the mountain's nature and characteristics.
- Yourself: trust in your skills and abilities.
- Others: trust in the people around you, your pack.

Oxytocin will give you the support and motivation to continue your journey with your peers, to foster a connection with the mountain, start a conversation with her.

Half way through your climb, you will realize that the clarity of the sky is only temporary. The ephemeral characteristic of your environment and the mistiness of the skies join the rapid change of your body's response to the efforts you are putting.

Endorphin kicks in.

The high level of excitement and adrenaline will help your body produce Endorphins. This hormone's main function is to mask the pain you are currently feeling. You continue, knowing that you are stretching your body's limits but reassured with every step you take that the pain you might feel will be anesthetized.

The trail gets steeper, your steps are harder to make, and the weight of your backpack on your shoulders is heavier. The climb is getting harder than you have imagined. Your breath is now inconsistent, so are your steps.

Faster and faster, as you see yourself getting closer to the summit, your heart beats.

Dopamine kicks in.

Dopamine is the hormone responsible for the 'good' feeling you feel having completed a task. Its highly addictive nature leaves you always wanting more. You are now motivated to achieve incremental goals and eager to reach the summit you have been envisioning since base camp.

For your summit push, you marry your breath with your steps, establishing a cycle of an interwoven system: one breath, one step.

As you stand a few steps away from the summit,

WOLF PACK

Because no one is going to do it for you, you have to do it for yourself.

the culmination of trust from the oxytocin, coupled with the endorphins masking your pain and the good feeling from the dopamine knowing that you have almost achieved your goal, results in a massive mental push leading you to the top.

Serotonin kicks in.

Significance. Pride. Status.

Serotonin, often referred to as the leadership chemical, gives you the reason why you are here. It drives you to seek the recognition for your accomplishment, to be proud and satisfied of your accomplishment, thus creating a sense of allegiance to the mountain.

SEE YOU AT THE TOP

ABOUT PEOPLE

GHIDA ARNAOUT

Growing up,

I was always the kind of person who wants to resist the norm. I was playing football at school with the guys. Jamming on my electric guitar and claiming the gothic lifestyle. Growing up in the small and kind of conservative city of Saida, this stuff wasn't exactly welcomed. I escaped the conventional life that my society was expecting of me in 2010 to travel to Dubai and start my career there first as a dietitian and then as a social media manager in a global advertising agency. In Dubai, I started trying a lot of sports, one of which was wakeboarding which I became very fond of. A fateful New Year's Eve accident in Madrid in 2013 changed my life as I know it. I was pushed from a podium breaking my hip in three places and needed emergency surgery that placed 3 screws in my hip. Due to this accident, I was bedridden for one month and put in a wheelchair for 4 months. In the process, I lost my job and was sinking in a spiral of anxiety and depression. I could not do anything on my own, not even shower and I had to depend on everyone to do the basic things. I felt like I lost control of everything. It was then that I gained an appreciation for things that I had previously taken for granted (like walking!) and in April that year I got the all clear from my doctors that I can walk on my own again. This is when I decided to book a ticket to Nepal and go on a solo trip away from everything I know. I obviously was not allowed to trek or do anything that would put a strain on my hip, but I instantly fell in love with the mountains and the people there and that trip really did change



my life. Later that year, when my hip healed completely, some friends in Dubai invited me to go on a rock climbing and camping trip in Oman. As a way to manage my anxiety, I said yes. I thought that if I put myself in a position that is outside of my comfort zone and got through it, it might help all those anxious feelings I was having. Also, after spending one year of not being allowed to do any kind of sports and adventures, I felt that it's all I want to do once I heal. I fell in love with rock climbing on that trip and being outdoors brought me so much comfort and relief. This is when I knew that this is going to become a lifestyle. I booked an 8 day trekking trip in Langtang, Nepal afterwards and since then all my travel trips changed to adventure travel trips. I started sharing my journey on social media because I wanted more people to try the amazing sport of rock climbing and to seek healing in nature. To me, nature felt like home. It was the place where I was the happiest. In 2017, I had to do another surgery to remove the screws from my hip which resulted in another year of no sports allowed. That time was definitely not easy at all, especially that I had to stop climbing and start all over again. Doing all these adventures with a previous injury definitely makes me feel



more scared and more cautious but I try my best anyway. I never put pressure on myself to achieve summits or finish routes. I do this because it's my happy place and my therapy. I became so addicted to this life that I hosted an Arabic adventure travel TV show called 'Quest of Adventure' where I travelled around the Arab world climbing mountains, deep water soloing and jumping out of planes. In 2018, I quit my job and co-founded the adventure travel company Life Happens Outdoors with Rami, my now husband. The outdoors also changed his

life in a similar way, so we wanted to bring it closer to people. We now lead trips and take people around the world on experiences such as crossing glaciers, kayaking in the Arctic and trekking in Bhutan to name a few. I believe fully in the transformative power of being outdoors because it's been such an inspiration in changing my life and bringing me back from difficult places. And I hope through this magazine and through what we do at Life Happens Outdoors we're able to inspire people to find their own personal paths in nature.

ABOUT PEOPLE

JOHN SAAD

From media, events and advertising...to trekking and nature enthusiast;

"John Saad", a man in his early 50s, talks to "The Mountains Magazine Lebanon" about his experience with nature and the outdoors, and how it made him realize that it's never too late for anyone to have new hopes and dreams!

My life revolved around 3 major cities, said John, Beirut-Rabieh and Kaslik. I was caught up in my work and professional ambitions, and I wasn't aware yet of the magic that lied outside of my daily comfort zone and routine.

After meeting and working with Lebanese mountaineer "Joyce Azzam", John had the opportunity to start exploring the Lebanese outdoors and enjoying his 1st hikes. Consequently, he fell in love with the beauty of our Lebanese nature, and especially mountains, as they bring a sense of achievement when summiting them!

As his passion for the outdoors grew stronger, Saad devoted more time to hiking (at least once a week), and he decided to completely step-out of his comfort zone by launching a project under the slogan of "Life begins at 50"!

"I want to encourage and prove to everyone that you can be a non-athlete above 50, and step outside your comfort zone by pushing beyond your limits. Go and take a deeper



JOHN SAAD

look into nature, climb mountains, and go trekking, because to understand nature is to understand oneself."

For this project, John originally planned to do the Mt Everest Base Camp Trek this year with a full coverage on his social media platforms, having already found sponsors and media deals to cover for the trip, but because of the lockdown imposed by Covid-19, he now hopes that he'll be able to accomplish this big dream next year. In the meantime, John is going hiking and exploring different parts of the Lebanese outdoors on a weekly basis. It's during those journeys in the heart of his country's most magical treasures, that he realized that to experience the majesty and beauty of nature, you don't have to go abroad... "It's all here, said John, right next to you, around every village and every corner of our beloved Lebanon".

As a final word John didn't forget to thank all his "Hiking Buddies" (his 2nd family)! People like "Everest Summiteer" Avedis Kalpaklian considered by him an inspiration to all outdoor athletes, Issam Khairallah, Lindos Daou, Lina Shuman, Marianne Ashkar, Zeina Khalifeh, and many others..



JOHN SAAD OVERLOOKING WEST BEKAA & MT. HERMON, LEBANON



JOHN SAAD WITH HIKING BUDDIES, JESS SALLOUM & LINA SHUMAN



JOHN SAAD WITH AVEDIS KALPAKLIAN

RESERVES & TRAILS

BOUKAAT LOUBNAN TRAILS

The Boukaat Loubnan Trail name is derived from the Old Testament giving the name to the Bekaa Valley. This trail is the first long distance trail across the mountains of the Bekaa Valley, covering the Western and the Eastern Mountain Chain known as the Anti Lebanon.

The idea behind this trail is a dream becoming true to its founder Gilbert Moukheiber. Gilbert is the founder of 33 North and known as the guru of trekking and winter expeditions in Lebanon. The trail today became a reality with extensive personal expertise, funding and logistical support of 33North, and the support of the Lebanese Army and the local communities. The trail was designed in linear and loops shape for every section of it. Boukaat Loubnan Trails offer a richness in cultural diversity merged with picturesque natural environment. Walking the trail is an experiential and a transformational journey; an emersion through history, culture, traditions, nature and culinary experiences.

The trail starts from Deir el Ahmar and ends in Heberiyeh South Lebanon. The linear distance of the trail is 350 km. Sections level of difficulty are rated from medium to advanced, difficult for some parts. All the sections have been delineated, walked and tested.

The trail is divided to three long distance trails. Each long distance trail is a five to seven days trek.



THE NORTH BEKAA TRAIL by Gilbert Moukheiber

The North Bekaa Trail starts from Deir el Ahmar and crosses the North Bekaa Mountains all the way to Hermel and to the El Qaa Village.

Main attractions: Women Association of Deir el Ahmar, Couvent Rouge, Kasr Bent el Malak, Mazraet el Aqoury, Yamouneh lake, Yamouneh nature reserve, Nabee el Arbaine and the Roman temple of Yamouneh, the highlands of Yamouneh, Chateau Barka, Mazraet el Barakeh, juniper trees of Rabiaa, Ouyoune Orogsh lakes, Jbab el Homr steppes, Saint Maroun el Assi, el Assi river, Ain el Zarka.

Surrounding attractions: Baalbek Roman temple, laa Roman pillar, Shlifa cascade, Saidet Bechwate, the Rosary of Beshwate, Kornet el Sawda, Kornet El Aashra, couvent rouge.



THE ANTI LEBANON TRAIL by Gilbert Moukheiber

The Anti Lebanon Mountain Range Trail:

The trailhead of the Anti-Lebanon Mountain Range is located in Qaa village located on the Lebanese Syrian border. The trail starts from the El Qaa village all the way to Anjar Anjar. This trail sections crosses the Anti-Lebanon Mountain range.

Main attractions: archeological ruins of the Qaa village, Set Balkis water canal, Shepherds village in Ras Baalbek, religious and cultural attractions in Ras Baalbek, the ancient caravan route, Baalbek city attractions (Roman Temple...), Kobet Douris, Hima Kfarzabad and Anjar Oumayad city and Eco park.

Surrounding Attractions: Majdel Anjar temple, Taanayel, Bayt el Falah Terbol.

Le Tour du Mont Hermon Trail:

Inspired by the famous Tour du Mont Blanc, le Tour du Mont Hermon covers the Roman Temples across the Mount Hermon region. The trailhead starts at Al Mannara region to Chebaa, and El Heberiyeh.

Main attractions: Al Mannara Roman Temple, Yanta Temple and ruins, Bakka khirab el Kneisseh and Roman Temple, Nabi Ayloun, Mdoukha Roman Temple, Ain Arab pressoirs and watermills, Al khoder, Kfarkouk military trenches, Deir el Ashaer Roman temple, Dahr el Ahmar caves, Rachaya old Souk, old houses, the independence citadelle, Mount Hermon, Tanoura ruins, Ain Hershe Roman temples, Ain Ata ruins, Hebberiyeh Roman temple. Surrounding Attractions: El Mhaydseh ruins, el Biri ruins, Kfarmeshki Roman temple and caves.

The trail is managed and guided by 33 North offering internationally certified mountain leaders. Two forms of packages are available:

1. Full support, guided, luggage transfers and accommodation in guesthouses and hotels;
2. Unsupported, unassisted guided tours with backpacking and camping.
3. Snowshoeing and ski pulka expeditions.

Contact details: 03454996

Facebook: <https://www.facebook.com/33NorthLeb>

Instagram: <https://www.instagram.com/33northleb/>



TOUR DU MONT HERMON by Georges Wakim

RESERVES & TRAILS

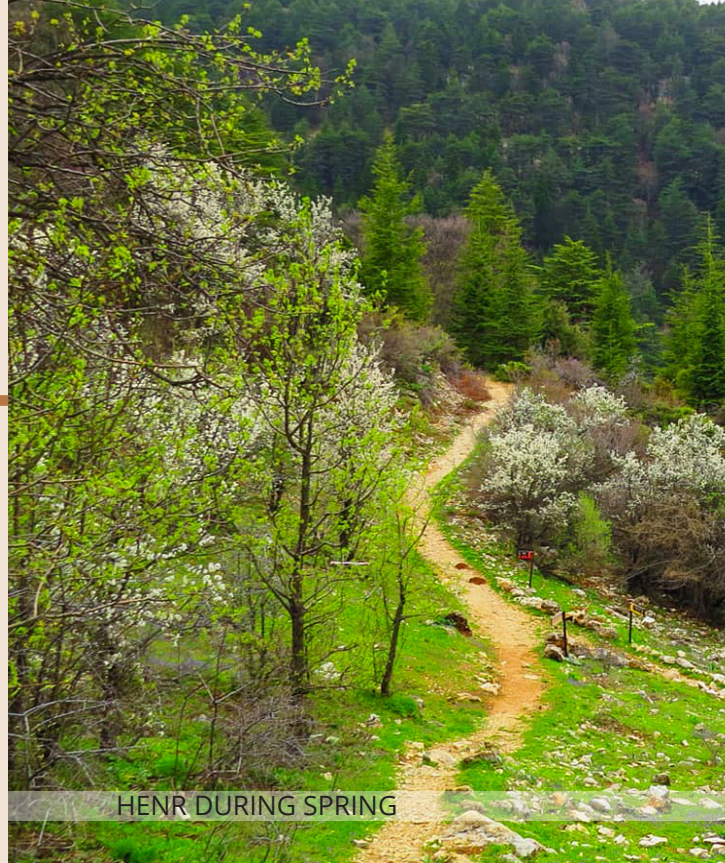
HORSH EHDEN NATURE RESERVE

*Time spent amongst trees is
never wasted time - Katrina Mayer*

Horsh Ehden Nature Reserve (HENR) covers about 1700 ha of public land ranging in altitude from 1200m to 2000m. The forest is recognized for its outstanding value for biodiversity conservation. It was declared a Nature Reserve in 1992.

A mountainous forest lying on the foothills of Mount Makmel, Horsh Ehden Nature Reserve is located at 90 Km from Beirut and 30 Km from Tripoli. It extends over 1700 ha of public lands where forests and woodlands cover approximately 450 ha. It is accessible from Ehden village and the ride is 3.5 Km south-east of the village.

Lying on the western slopes of Mount Lebanon chain, the forest is characterized by a Mediterranean climate with harsh winters and hot summers. It is acknowledged to be among the few Lebanese forests featuring a panoply of plant associations growing on the western slopes of Mount Lebanon chain. The plant cover formed of 1030 plant species, is highly diverse comprising mixed associations of Calabrian pine, Kermes and oak, Lebanese cedar, Cilician fir and Juniper; and other associations dominated either by Cedar of Lebanon or Calabrian Pine or Turkey oak. Numerous springs are found in HENR and which are Ain Naassa, Ain Al Bayada, Ain Yahmoura, Ain Al khoury, Ain Al Kareh and Ain Al Nawehir.



HENR DURING SPRING

Spreading on the foothills of Mount Makmel, it is the southernmost limit of the distribution of Cilician fir (*Abies cilicica*) populations in the Northern Hemisphere. The Reserve embraces unique assemblage of conifers, deciduous and evergreen broadleaf trees. It hosts the last remaining population of the endemic wild apple (*Malus trilobata*) of Lebanon. The reserve is refuge for unique gems of plants and animals found only in Lebanon or distributed in the eastern Mediterranean and known as globally and nationally rare and threatened. The forest is part of the Endemic Bird Areas (EBAs), an important Bird Area (IBA) being embedded in the Levantine mountains. The plants palette features 39 tree species, 1000 plant species, 26 species of mammals, 168 species of birds, 300 species of fungi, and 23 amphibians. During your visit to the reserve, you can either stroll or hike in the reserve. Looping the nine sub-regions of Horsh Ehden in a day, while trekking off-trail on short laps, is an enriching adventure; an unforgettable four-season journey in one of the most charming and colorful forests in the country. The forest holds deep contrasts, like Lebanon itself, reflecting the beautiful contradictions found in nature.

The reserve is accessible from Jouit and Ain El Bayada. It features nine sub-regions and more than 10 meandering trails in the valley and on the slopes of rolling hills.

What can you do in the reserve?

- Long walks, climbing, hiking, van tours, star gazing, archery, painting, photography (year round).
- Mountain biking (year round except during snow season).
- Snowshoeing (snow season).
- Bird watching (spring through fall, April-September) using the hidden observation spot.
- Awareness activities (discovery walks, presentations and films about the reserve for students and children, year round and especially during the school year).
- Reforestation activities.

Best season to visit?

For hikers, autumn and spring are the most temperate and enjoyable seasons for outdoor walks.

For visitors who love soaking up nature's many colors, October is the best month to enjoy autumnal colors.

For flora enthusiasts, spring and summer are especially good times to visit the reserve. Plants and flowers can be identified with the help of reserve guides and wooden signs peppered along the trails specified for walking.

Birds and animal lovers will enjoy using the hidden post for spotting birds and mammals.

Administrative info

Opening/Closing hours

9:00 AM – 5:00 PM (autumn and spring)

9:00 AM-3:00 PM winter

8:00 AM – 7:00 PM (summer)

For overnight stay, no movements are allowed outside and/or inside the reserve after 8 PM.

Once on site, if the landscapes inspire you a hike in the forest, book your guide on the following 0096170601601

<https://www.facebook.com/ehden.nature.reserve/>



HORSH EHDEN NATURE RESERVE By Spyro Klitira



A NEVER ENDING BEAUTY OF HENR

AKKAR TRAIL FOREST FIRE

Last year, at Mishmish Akkar, a huge fire broke out from “Wadi Jhannam” at an altitude of 1,000 m and reached 1,800 m in less than two hours, burning all the pine and oak forests in its path, reaching the cedars forests also. It was so painful and sad to see these ancient trees burning. The hardest part was that our team only consisted of 5 young individuals, who fought the fire with bottles of water. The team failed to extinguish the fire until an area of 80 hectares was burnt. This catastrophic damage was caused by several factors, the main factor was the slow response of the civil defence team in the region. They are not blamed knowing that they also have a lack in equipment to fight fires in this rough terrain.

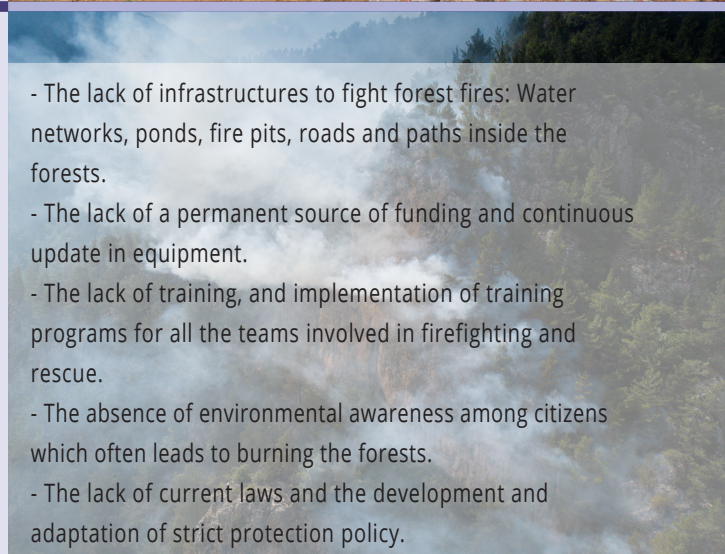
Week after week, the fire season was breaking records in Akkar. Darb Akkar association took the initiative to think of solutions to reduce the damages. Hence the idea of collecting donations came up to purchase a truck well equipped to intervene in forest fires and to support local firefighting teams.

Within a month, we were able to collect an amount of 21,000 USD, bought the truck, equipped it, and called it “Lazzab”. Its name was inspired by the Juniper tree which is considered the undisputed queen of the Lebanese highlands, and the “Darb Akkar firefighting and mountain rescue team” was born.

Lebanese forests suffer annually from severe damages as a result of fires which lead to a decrease in forests area. The years 2020 and 2021 alone destroyed more than 3000 hectares in Akkar, most of which are forests and natural habitats for many wild animals, birds and insects. Akkar lost in just two years about 14% of its forests, estimated about 21 thousand hectares.

About 70% of Akkar is considered a high fire risk area, meaning it is perfectly ideal for catastrophic fire scenarios that may destroy one of the most important ecological sites in Lebanon. The valleys and the plateaus are exposed to the dry eastern winds in summer, which makes controlling any fire very difficult if the response was delayed. Akkar faces a lot of challenges, perhaps the most prominent are:

- The shortage in equipment for forest firefighting, especially small 4x4 vehicles to penetrate deep into the forests.
- The lack of planning from municipalities and local authorities to respond to fire hazards.



- The lack of infrastructures to fight forest fires: Water networks, ponds, fire pits, roads and paths inside the forests.
- The lack of a permanent source of funding and continuous update in equipment.
- The lack of training, and implementation of training programs for all the teams involved in firefighting and rescue.
- The absence of environmental awareness among citizens which often leads to burning the forests.
- The lack of current laws and the development and adaptation of strict protection policy.

“Akkar Trail” team seeks to have their personal equipment to be self-sufficient in order to fight any fire within rugged environments and difficult roads, while taking into consideration the activation of rapid response plans for forest fires. The plan focuses on:

- Awareness and fire prevention.
- Early warning and immediate reporting of fires.
- Rapid intervention for firefighting.
- Support, evacuation and extinguishing the main fire and any secondary one.
- Evaluation of the final situation and reporting losses and damages.
- Planning for short, medium and long term recovery.

The team currently consists of about 10 volunteers, owns two vehicles equipped locally through donations from friends in Lebanon and abroad.

“Lazzab” and “Shouh” are the only two vehicles available for the entire highland of Akkar, they are capable of reaching the deep and hard paths of the forests to fight any fire in the area. Until 28/8/2021, the team fought 27 fires, including huge ones. Plus, their vehicles proved the ability to reach about 600 m depth in the forests, more than any civil defence vehicle in Lebanon.

Finally, Akkar’s forests need more protection than ever, as the danger is greater than before, and we hope that cooperation between parties will lead to a balance between the economy and the sustainability of resources, in order to ensure that future generations will be able to enjoy our forests. It is our natural diversity in Lebanon and the Middle East.

Khaled Taleb



1. Cloud seeding by dispersion devices

2. Cloud seeding by aircrafts

What is cloud seeding?

Cloud seeding is a type of weather modification, which disperses certain chemical substances into the air, to modify the amount or type of precipitation that falls from existing clouds.

How does it work?

Cloud seeding chemicals include silver iodide, potassium iodide and dry ice (solid carbon dioxide). These chemicals are released into the air using two methods:

- Aircrafts, which drop the particles from above by flying through the inflow of a cloud,
- Dispersion devices (such as cannons) located on the ground, which shoot large quantities of the chemical substance that will be carried high by air currents after release.

The crystalline silver iodide particles have a structure similar to ice. Once inside the cloud, “Ce qui se ressemble s’assemble”; water droplets begin to cluster around it and freeze as they gather together. These frozen clusters eventually grow too heavy and fall from the clouds as snow. Silver iodide can also be used to reduce the size of hail naturally produced; it was a project funded by insurance companies in Canadian Alberta, in an effort to minimize property damage caused by hailstorms every year. The process called “hail reduction or suppression” aims to create more ice crystals at warmer temperatures that compete for the cloud’s liquid water, therefore making smaller hail.

Also, warm areas such as the UAE, which receive less than 100 millimeters of annual rainfall, are turning to cloud seeding in an attempt to increase rain. They fire salt crystals into warm clouds that have an updraft. The latter then sucks up the ice crystals into the cloud, which attract tiny particles of water that collide, becoming heavier and eventually falling as rain. This is called hygroscopic seeding.

What are the pros of cloud seeding?

- Rain creation: Essential in keeping areas fertile and hydrated for farming purposes, where natural rain is not enough.
- Weather regulation: Some weather conditions can be dangerous if not properly managed. Cloud seeding

CLOUD SEEDING

provides control by limiting precipitation which could develop into storms causing mass destruction.

•Reduction of crop/property damage: It can manage the formation of storm clouds.

•Geographically oriented: It can create a micro-climate. For example, airports can use it to create stable weather conditions for their runways.

•Reduction of the impact of droughts: Droughts can be prevented in dry areas by increasing rainfall.

What are the cons of cloud seeding?

• Uses dangerous chemicals: The chemicals produced during cloud seeding are present in the water and soil deposits of the area where it has been practiced. For example, if exposed to high amounts of silver, one can develop permanent skin problems. Also, there has been a rising situation of iodism, which is a type of poisoning caused by iodine. It has severe effects on people such as skin rashes, headaches, and running noses among other symptoms. Not to mention that all these chemicals disrupting natural ecosystems will eventually harm plants and animals.

•It is expensive: Planes are used to get the chemicals into the air and this is a big obstacle in areas where famine and drought are rampant and cannot afford the technology.

•Poses weather problems: Dry areas are not usually well-positioned to handle certain weather conditions, and thus, may become easily flooded and cause more harm to the already struggling environment. Also, there are claims that increasing rain in one area can have the opposite effect on the neighboring areas, and accusations of “stealing rain” have been causing conflicts between those areas.

Cloud seeding is a controversial idea; some countries fund and apply it (like Russia and China), other countries are still skeptical and do not offer government funding for it. These techniques still need a lot of studies and research to assess long term implications that come from cloud seeding. In addition, there is not enough evidence that this process is actually beneficial for increasing or decreasing precipitation. Despite having a good number of positive impacts, it also comes with threats that are not well understood yet which makes it an unreliable solution.

Mira Sabbagh, Chemist

DENDROCHRONOLOGY

GROWTH RINGS

Trees are fascinating living things, always a source of aspiration and wonder for us.

Being perennial plants, which means they do not die at the end of the vegetation season, trees, may live long while achieving important growth in length and in diameter.

One of the main characteristic of trees is that they are woody plants, where wood provides them with a solid structure allowing to sustain their height and weight pressure against gravity.

This structure is chemically composed of lignin, a molecule rich in carbon that is responsible for those hard tissues of the trunk and branches. The tissues are lignified through a process that starts at the end of each growing season. The cells are pushed deeper towards the center of the tree, and the new tender cells and tissues of the new growing season are always on top of the old, meaning towards the external parts of the trunk. Saying this, the oldest part of the tree is in the core of the trunk. But how do we date it or understand its age? In temperate regions, the annual growth is stopped by harsh conditions (drought or cold), so growth ceases, and the lignification process is initiated. The color of the cells and tissues turns darker in comparison to the new growth. Since this phenomenon is repeated every year, those darker areas form a kind of "annual rings" that we can see when a tree is cut (a cross section as in figures 1 and 2).

In other words, if we count the rings, from the center towards the outer part (before the bark), we can have an estimate about the tree age. However, a closer look at those annual rings, reveals that the distance (width) between two rings is not constant and varies from one year to another. A wide ring means that the growth was high, while narrow rings reflect a year facing some harsh conditions (figure 2).



FIGURE 1 : PINE STUMP CUT



FIGURE 2 : ANNUAL RINGS OF A TREE WITH THE CORE (CENTER IN THE UPPER PART)

Luckily today we have a non-destructive method that relies on an instrument called increment borer, which foresters use to extract a cylinder of wood from the tree without harming it, and further those samples are used for analysis.

We should know that a tree is like a memory stick for the environmental insights which the tree witnessed during its life, and "saved in the memory" of its annual rings.

The science of studying the tree rings and their variation across time is called "dendrochronology", "dendro" for trees, and "chronology" for time. We insert the increment borer in the trunk at breast height and extract the sample, which is later processed in the lab to have a clear reading of the rings over

a stereoscope. If we reach the core of the trunk, we are able to determine the age of the tree. If the tree is alive, then we can estimate what year it was born. In addition, in the lab, we are able to measure the total and annual wood increment, through the eye or with a micrometric counter with a magnifying glass. We can also extract wood samples from the rings for chemical analysis, to determine the causing agent for good or poor growth. Comparing ring width of different trees within the same forest, same species, or with different species enables studying different effects on tree growth (dendrochronology). Let's take an example of a tree, and "read" its annual rings through an illustration (figure 3): A tree was born in 1958. The first years the growth was minimal, then increased a bit as the root system was able to catch more humidity (white circle). After the 6th year, the tree was subject to an accident, like a land slide or a rock which hit it on one side and exposed a part of the root system to the air. The growth was asymmetric for several years (green circle). The tree is straight growing again, with neighboring trees, but the growth is limited due to competition between trees (orange blocks). A selective cutting of some trees was realized in the forest, and there was more light, water and nutrients available for our tree, the growth was greater during several years (green blocks). In 1984, a forest fire devastated the area, and the fire reached a part of the trunk of the tree, but the tree survived. A cicatrized new wood covered the annual growth (red square). Around 1993, a series of drought years affected the growth (red rectangles), and another series of narrow rings is observed starting 2001, as an insect outbreak defoliated the leaves of the tree (yellow rectangles). Few years after in 2011, the tree was cut.

The main conclusion is that a bigger tree diameter does not necessarily mean the oldest. Dendrochronology was introduced to Lebanon in year 2003, with a mission from the Tree ring lab at the University of Arizona, which is the lead research hub in dendrochronology. I was honoured to be part of this mission which covered all the old forest stands in Lebanon for sample extraction, mostly from old cedar,

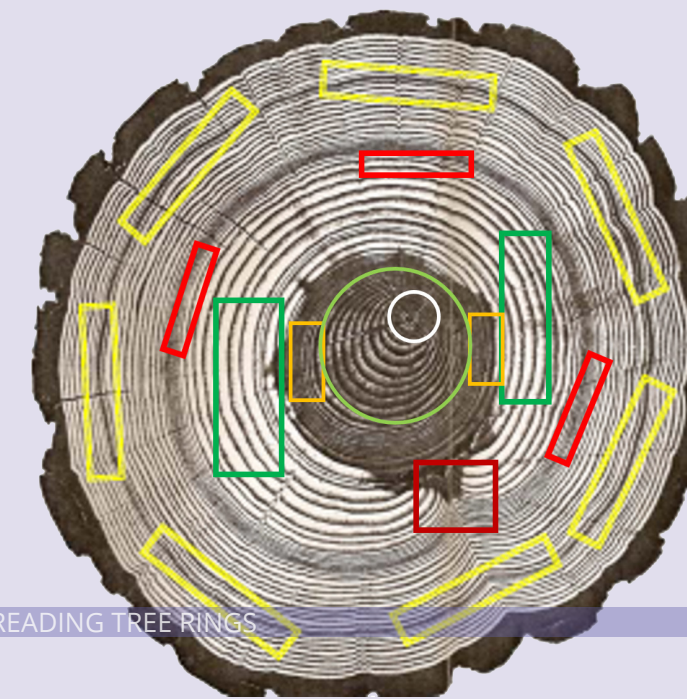


FIGURE 3 : READING TREE RINGS

juniper and fir trees. Samples were taken from Maasser el Chouf, Barouk, Jaj, Tannourine, Bcharreh, Ehden, Karm el Mohr, Jurd el Njass, Ras el Nahr, Qamouaa, Karm Chbat and Jbab el Homr, etc. Our samples were compared with others from Syria, Jordan, Cyprus, Turkey and Greece. The research was conducted by a multinational team involving researchers from the USA, Russia, and the concerned countries. The results allowed to better understand the factors affecting tree growth in the East Mediterranean (spring precipitations and snow melt), understand the climate and atmospheric circulation of the region, and also date the trees. These results allow to better understand statistically what is the frequency of drought in the region (5 consecutive years was found to be the maximum), the increasing drought and forest fires due to climate change, the importance of mountain elevation to understand tree growth, and much more. The least important information is the age of trees. Despite the historical description of the cedars and their allusion to eternity, this immortality is only linked to our national pride. Scientific facts proved that all the existing living trees in Lebanon are far from being millennial, with the oldest witnessing the end of the crusades period. Yet, cedars of Turkey were older, with some millennial specimen. Nonetheless, to appease the deception of the readers, a dead cedar stump which is currently exhibited at the National History Museum at the American University of Beirut was dated as 8000 years old. Note that the oldest living tree in the World remains the bristlecone pines in California, roughly 5000 years old.

Dr. Jean Stephan

MUSHROOMS LAND

Jaw dropping, spectacular, weird, mysterious, & out of the ordinary are common terms applied upon the discovery of wild mushrooms. They come in various shapes, sizes, and colors, a very diverse world; underground as much as over the ground.

Have you ever encountered a specimen in your life or during your nature getaway? Not yet?

We definitely got you covered in this introductory article about wild mushrooms and where to find them in Lebanon! Mushroom hunting (or foraging) will definitely change your perspective about the surrounding environment. While hiking, some hikers tend to walk quickly counting the steps and the kilometers strolled & don't give much attention to the marvelous wildlife around them i.e. plants, animals and mushrooms!

In order to find mushrooms, you must slow down your pace and observe life around you in all its details: from the rocks to the soil; from the tree canopy down the branches, the trunks and all the litter covering the soil; all plant forms: from massive trees to bushy shrubs down to tiny plants and flowers covering the soils... it is within these details that your eyes will be granted with the enchanting presence and the traces of wild animals as well as astonishing mushrooms: from the discrete tiny ones to showy and big ones.

Where can we see mushrooms while hiking?

The next time you go on a hike in the fall or in early spring, when the soil is still humid, look for mushrooms around you. You can find them abundantly under the trees, or on dead decaying trunks that have been knocked by storms the previous winters or even on the carcass of dead insects, among the litter (dead leaves and branches covering the top soil) ...

Plants? Animals? Or something else? What are these curious creatures that we call mushrooms or fungi?

Mushrooms are neither plants nor animals; they belong to a world of their own that scientists call "a kingdom", separately from other living organisms i.e. plants, animals or bacteria... The visible part of the mushroom that we spot is actually its fruiting body (or carpophore), i.e. the part that it uses to reproduce and disperse. This visible part



MOREL (MORSELLA) MUSHROOM by Khaled Taleb



MOREL (MORSELLA) MUSHROOM by Rana El Zein

of the fungus is actually the tip of the iceberg, the massive part of the fungus relies underground and consists of a large web of filaments that scientists call mycelium. It is this underground part that helps the mushroom feed and develop.

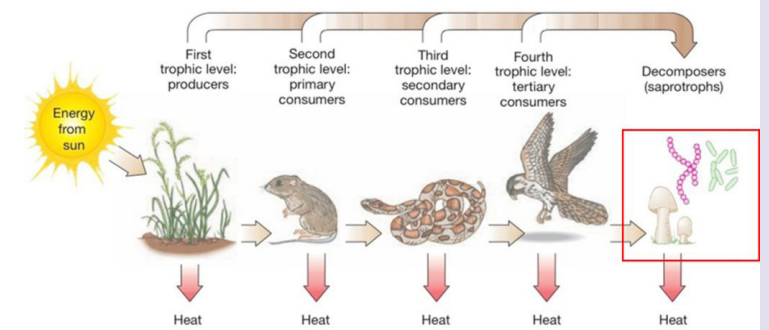
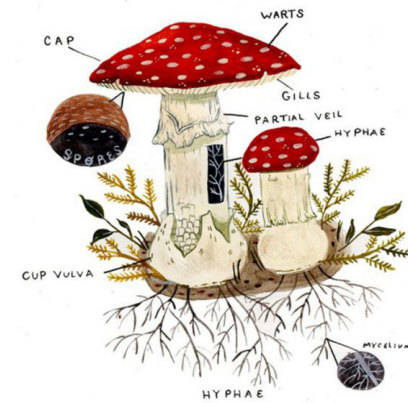
What role do mushrooms play in nature?

Mushrooms are essential for life. In the natural ecosystems, we call them "recyclers": they decompose organic matter (alive or dead) and recycle essential nutrients back into the soil, making them available for plants to absorb and turn into food for themselves and for herbivores and carnivorous animals all along the food chain. Some mushrooms are specialized in decomposing organic matters or dead plants and animals, we call them "saprophytes".

Most of the mushrooms growing under the trees in the forest are helpful ones! Scientists call them "symbiotic mushrooms or mycorrhizal fungi", since they help the tree grow and survive to the point where some tree species cannot live without their "friend mushrooms".

Some mushroom species on the other hand are

MUSHROOM ANATOMY



Natural regeneration cycles



EARTHSTAR (GEASTRUM SP.) by Rana El Zein

Tips you need to know before you start your mushroom hunting adventure.

If you're planning to collect edible wild mushrooms and unless you are an expert, our first advice would be to get it checked by experts to avoid any unfortunate events or even death. That is why we also created Mushrooms of Lebanon & Levant, a Facebook group with a wide community bringing together experts & amateurs in the field of mushroom hunting.

In fact, not all mushrooms are edible or tasty. Some of them are tasteless but some are very dangerous: they can cause hallucinations, some are toxic and carcinogenic, while some are lethal! Yes, mushrooms can kill you! And many of the poisonous and lethal mushrooms can resemble edible one!

How can you tell the difference between an edible wild mushroom and a poisonous one? Unless you are very experienced in mushroom identification, you just can't!! Due to the risks associated with picking mushrooms we do not recommend unexperienced gatherers to consume any before a trustworthy identification is done by an expert. Over the years, many superstitions have been associated with mushrooms. Some of these are amusing and harmless, but some are dangerous. It takes a good deal of education and experience to safely collect edible wild mushrooms. Meanwhile, enjoy learning more about wild mushroom and don't forget to share your mushroom pictures with us on our community Facebook group!

Romy Azar & Dr. Rana El Zein

BIRDS OF LEBANON

Lebanon lies on the second most important migration route, the Eastern Mediterranean Flyway; this means a significant number and variety of birds pass through, or winter in the country each year.

The wide diversity of habitats found in Lebanon makes it the perfect place for different species of birds to breed in it. So far 406 species of birds have been recorded in Lebanon and can be found anywhere across the country, in wetlands, agricultural land, forests, semi-desert areas and other varied habitats; 42 of those species are of global conservation concerns and all are illegally killed in Lebanon. Illegal hunting, habitat loss and degradation, unsustainable agriculture practices, pollution, logging and pesticides, are without any doubt contributing to the extinction of several species that without leadership and decisive action will disappear forever. These are birds that perform vital services and bring joy to people in many other countries; they should be recognized and valued as such in Lebanon as well. Controlling those threats offers an opportunity for Lebanese officials to show leadership and Lebanon itself could become an example in the region.

Enforcing the hunting law for instance, has the potential to increase national much needed incomes. Bird conservation offers an opportunity to improve our society from the inside and give a better reputation to our country at the international level. We see a future where tourists visit Lebanon to watch birds and where bird conservation related activities create jobs and economic growth in remote regions and communities.

ABCL:

The Association for Bird Conservation in Lebanon (registration # 2019/590) is dedicated to the conservation of birds and their habitats through education, awareness, advocacy, outreach activities and stewardship.

ABCL members envision a world in which the Lebanese people conserve nature in all its diversity. We wish to see people in Lebanon living in greater harmony with nature and in a more sustainable way. We envision a green Lebanon, where diverse partners collaborate to ensure that resident and migratory bird species and their habitats are protected, where their protection is valued by society, and where biodiversity conservation is considered in policy decision



COMMON KESTREL

making. We wish the forests, lakes, mountains and skies of Lebanon to be safe for birds. We want hunters to respect the law and illegal activities to be suitably punished.

"We are totally committed to bird conservation".

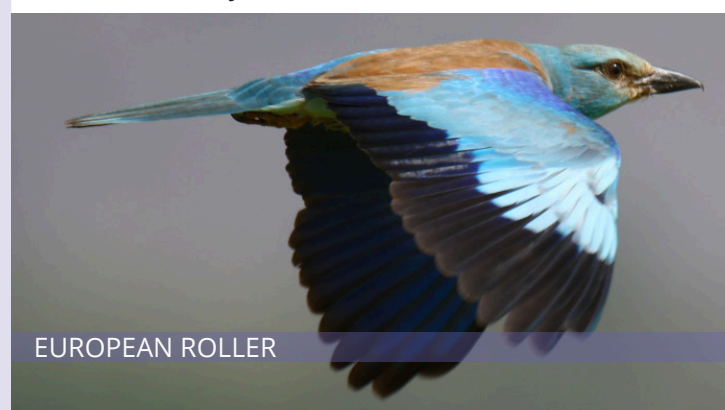
More specifically, ***our objectives*** are:

- Educate and raise Awareness to protect birds, value nature and prevent loss of biodiversity.
- Conduct Advocacy work to ensure that the proper laws and regulations are implemented and enforced.
- Promote innovative projects in the field of Bird Conservation.
- Contribute significantly to environmental conservation through increased public participation.

Our principles:

- Using scientific evidence to guide our work.
- Working to the highest ethical and professional standards.
- Being transparent and accountable to our supporters.
- Earning trust by living up to our commitments

***By Fouad Itani,
Co-Founder & President,
Association for Bird Conservation in Lebanon***



EUROPEAN ROLLER



Design is the journey of discovery

BY NAYLA NOUEIHED



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