

Syria: Satellite Images Reveal Extensive Logging in 114 Forest Patches in Afrin



Partner Organizations



Syrians for Truth and Justice was conceived during the participation of its co-founder in the Middle-East Partnership Initiative (MEPI) Leaders for Democracy Fellowship program, who was driven by a will to contribute to Syria's future.

Starting as a humble project to tell the stories of Syrians experiencing enforced disappearances and torture, it grew into an established organisation committed to unveiling human rights violations of all sorts.

Convinced that the diversity that has historically defined Syria is a wealth, our team of researchers and volunteers works with dedication at uncovering human rights violations committed in Syria, in order to promote inclusiveness and ensure that all Syrians are represented, and their rights fulfilled.



We are a group of Afrin's daughters and sons who love its soil and are devoted to its olive groves. In honour of the history of our ancestors and their struggle for the people and land; for the trees to reclaim their splendour; and for families and loved ones to return to their mountains, plains, and homes, we founded Lêlûn as the first step on the path towards justice and the restoration of rights to their owners. Throughout the Syrian conflict, the Afrin region struggled with existential threats and countless violations. The violations became systemic and coordinated after the Turkey-led Operation Olive Branch in 2018, as Turkey and its affiliated armed groups controlled the region.

Seeking to achieve justice, several young men and women from Afrin, with different ethnic, religious, social, and political affiliations, came together to establish the Lêlûn Association for the Victims of Violations in Afrin. The association aims to help all victims equally, defend their rights, and channel their voices.

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Syria: Satellite Images Reveal Extensive Logging in 114 Forest Patches in Afrin

Illegal logging in the region has been ongoing systemically since 2018, practiced by several of the opposition's SNA factions for funding

Executive Summary

In this report, Syrians for Truth and Justice (STJ) and <u>Lêlûn Association</u> for Victims in Afrin reveal illegal logging operations in **114** forest sites in Syria's Kurdish-majority region of Afrin. Based on the extent of the concentration of tree-cover loss, STJ monitored:

- High degradation of the forests in (57) locations, where perpetrators cleared the forests almost trees entirely.
- Moderate degradation of the forests in (42) locations.
- Low degradation of forests in (15) locations.

Notably, there are no official statics on the number of trees cut since 2018. However, STJ estimates the loss at tens of thousands, while several local sources that STJ met with for this report insist that the number is higher, verging on hundreds of thousands.

STJ has been keeping close tabs on forest logging across the Afrin region since late 2019. Field researchers monitored large-scale woodcutting in several of the region's forest areas. To verify the logging activities the researchers recorded, STJ talked to sources informed of the situation, compiled evidence from various open sources, analyzed the collected information, and matched the findings with satellite images.

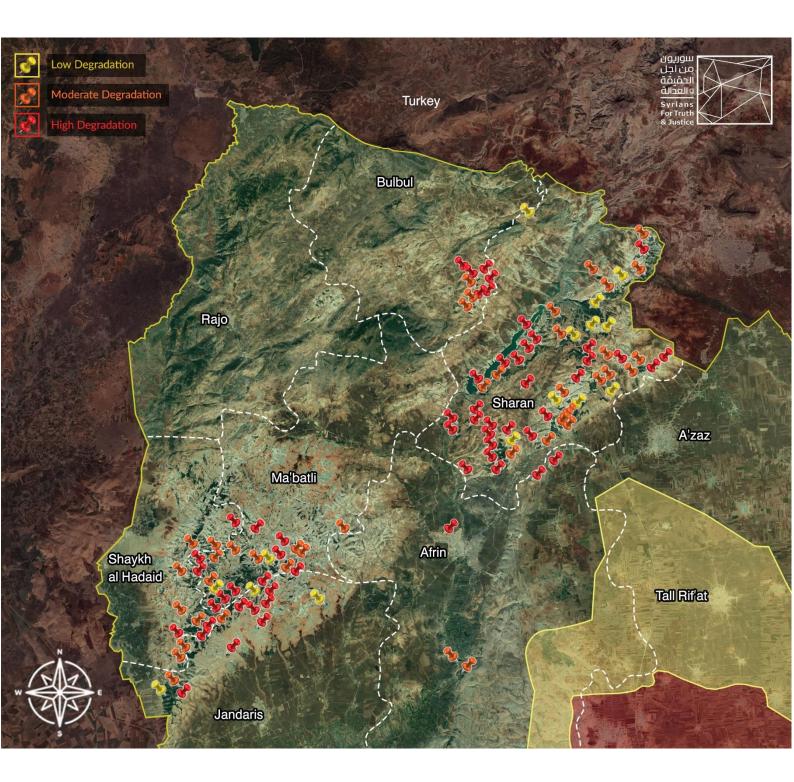
In terms of methodology, this report draws on accounts STJ obtained through direct interviews, in person and online, with local sources and witnesses in the affected areas, in addition to visual evidence and information available in open sources that addressed the report's subject matter. For further verification, STJ matched the collected data with satellite imagery, which provided overwhelming evidence of the rampant clearing of forests in the region after the Turkish military and affiliated Syrian armed opposition groups controlled Afrin following the 2018 Operation Olive Branch. Notably, several international <u>independent organizations</u> and UN bodies label the Turkish military's presence in the region as an <u>occupation</u>.

STJ carried out **36** interviews over the past months. The interviewees included several locals, internally displaced persons (IDPs), members from the opposition's Syrian National Army (SNA), relief workers, one of whom reported that his organization purchased logs harvested in Afrin, and two timber merchants in Northern Syria, who are familiar with timber trafficking routes and markets. Following the interviews, STJ thoroughly analyzed the accounts the field researchers obtained from the sources and the footage they collected from the cleared sites. Based on the analysis, the digital forensic expert with STJ demarcated the locations most affected by illegal logging and matched them with as many as (72) satellite images to identify the extent of tree-cover loss in the deforested areas.

Afterward, the digital forensic expert matched the satellite images with live footage (taken directly of the targeted forests or screenshots from available videos) to mark the exact locations of these sites and corroborate logging. Furthermore, the digital forensic expert obtained additional evidence, verifying that the perpetrators had cut down thousands of trees in over 15 other locations through compiling online footage, data from open sources, and conducting comparisons of satellite imageries of the region from various dates.

Notably, STJ has designated this report solely to illegal logging and subsequent deforestation in the Afrin region, intending to publish a separate and extensive piece on the illicit clearing of olive orchards belonging to the region's indigenous population.

In the map below, STJ locates the verified sites of illegal logging in the Afrin region, which amounted to 114. Importantly, STJ is confident that the actual number of affected forest patches across Syria is higher than the fraction the map exhibits.



Additionally, in the table below STJ lists some of the dominant plant species native of the Afrin region:¹

#	Species in Arabic	Species in Kurdish	Species in English
1	(al-Battim) البطم	Kewzan, Kizwan, Benîştokê	Pistacia
2	السنديان (ثمرها يُدعى بلوط) (Al-Sindyan which fruits is called balloutt)	Kelem, Mazî, and Gêlberî.	Oaks, which fruits are called acorns
3	(Al-'Arar) العرعر	Guvîj	Juniper
4	(Zaytoub Bari) الزيتون البرّي	-	Wild Olives
5	(Sumaq) السمّاق	-	Rhus
6	(al-'Enab al-bari) العناب البرّي	Ti'ok	Wild Jujube
7	(Shikoke) شکوکه	Şikoke	Hawthorns
8	(Hilroshik) ھيلورشك	Ĥiloreşk	-
9	(Ta'wi) تعوّ <i>ي</i>	Te'wî	-
10	مرخ (Markh) مرخ	Merx	Leptadenia
11	(Qattlab) قطلب	Qetleb	Arbutus
12	نرمك (Narmik)	Nermik	-
13	(Evris) ايفرس	Êvirs	-
14	(al-Dalb) الدلب	Çinar	Platanus
15	ديريرشك (يُصنع من جذورها الإمزك لتدخين السجائر). (Dirirshek)	Dirîreşk ₉ î Siĝirgotik	-
16	کنار (Kehnar)	Kenar	Ziziphus
17	(Shirt) شرت	Şirt	-
18	تزبي) تزبي	Tizbî	-
19	(Siftak) سفتك	Siftek	-

Deforestation and illegal logging <u>adversely impact</u> the environment, biodiversity, and communities in and around forest areas. Concerning the environment, the felling of trees obliterates a natural buffer zone that forests represent. Trees prevent soil erosion and floods and, most importantly, mitigate the risks of climate change, particularly spiking levels of carbon dioxide (CO2). Likewise, extensive logging has catastrophic repercussions for biodiversity. Deforestation threatens many animals and insects with extinction. The cut trees are habitats for a large and diverse number of animals, which enter into fierce competition for food after they migrate from their destroyed original habitats, becoming unable to reproduce.

¹ Abdo, Muhammad Ali. Mount Kurd (Afrin): A Geographical Study (in Arabic). 2009. P. 14.

However, the effects of deforestation remain the most harmful to the indigenous forest dwellers, threatening their lives in many ways. For example, animals and insects displaced from their habitats seek shelter in the inhabited villages surrounding the forests, which warrants unfamiliar contact between the people and wildlife. Moreover, this unprecedented interaction badly influences human health, because it is not only unnatural but also dangerous, creating fertile grounds for diseases.

Unabating logging also undermines the locals' food security. Surrounding communities consider forests as direct and indirect sources of food. They harvest fruits, herbs, and other edible plants or cultivate crops using the forests' fertile soil. Deforestation also threatens to <u>displace locals</u>, who either lose their food sources or <u>livelihoods</u> with the disappearing tree cover. The forests' soil provides farmers with organic nutrients for the crops, while it provides shepherds with forage for their livestock.

Notably, this report, which focuses on the waning forests in the Afrin region, seeks to complement the tremendous documentation efforts of other local and international organizations in this domain, including the <u>lengthy report</u> PAX has recently published. In the report, PAX documented deforestation across Syria, including in the western part of the country. Located in that part, the provinces of Latakia, Hama, Homs, and Idlib lost over 36% of their tree cover between 2011 and 2021. Based on remote-sensing analysis, PAX discovered that in the four provinces, "[f]rom an initial cover of 1,230km2 in 2010, 12 per cent was lost by 2016 and another 24 per cent was lost by the end of 2021. This represents a total loss of 45,320 hectares of tree cover in this time frame."

The organization also investigated forest batch disappearances in the Afrin region, particularly following the Turkish military and their affiliated armed groups' incursion into the region in 2019. The report highlights that the military hostilities displaced civilian Kurds again. At the same time, a new wave of IDPs sought refuge in Afrin, coming from other Syrian territories. As a result, north of Afrin, "a small park overlooking the city largely disappeared, as IDPs built informal settlements and cut down the trees for firewood and housing. In a 27 hectare forest patch (in 2015 and 2018), around 43 per cent was deforested between 2018 and 2021. The 45 per cent at the top of the hill has deteriorated badly (and is hardly forest anymore), as has the patch at the south, representing the remaining 12 per cent."

The organization obtained detailed figures on the extent of tree cutting in other areas in and near the Afrin region, particularly the Kurd Mountains and Mount Barsa. The report reveals that deforestation started in that territory two years after the Turkish-backed armed opposition groups established control there. With remote-sensing analysis, PAX documented "a 56 per cent loss in tree cover over the course of almost six years, largely through deforestation in this area, from an initial forest cover of 4,750 hectares in December 2015."

Forests Most Affected

In the sections below, STJ reveals the findings of its investigation of rampant illegal logging in seven forest spots in the Afrin region. The findings build on direct testimonies, exclusive footage, and satellite images from various dates corroborating the initial reports on the logging practice STJ obtained.

The Forest Zone between Qatmah, Bafilyoun, and Kafr Janneh

Based on the testimonies the partner organizations collected and the related satellite footage obtained later, the perpetrators started clearing trees of in this location in 2019—a year after the Turkish military and the SNA controlled Afrin.

Several factions maintained a military presence in the Afrin region following the Türkiye-led Operation Olive Branch in 2018. After the incursion, the Levant Front/al-Jabha al-Shamiya controlled Afrin until October 2022. The area then witnessed a series of clashes among the armed opposition groups, ultimately leading to the <u>permanent presence</u> of the Hay'at Tahrir al-Sham (HTS)—former al-Nusra Front, in the Kurdish-majority region. Today, HTS controls Afrin jointly with the Hayat Thaeroon for Liberation and its affiliated factions.² Notably, STJ has corroborated the HTS's extensive military presence in Afrin in a recent <u>lengthy report</u>, which sheds light on the HTS's military and administrative power dynamics in the region.

Qatmah Forest

The Levant Front/al-Jabha al-Shamiya started commercial logging in the <u>Qatmah Forest</u> on a limited scale after it controlled the area in 2018. The harvesting increased in late 2019 and early 2020, especially with the arrival of new batches of IDPs into Qatmah, who fled their homes in Idlib province, escaping the military operations the forces of the government of Syria (GOS) initiated against their towns with support from the Russian military.

With the Front's permission, IDPs set up their tents in the forest in random spots. As they settled down, they began to cut trees down individually and arbitrarily to use the logs for cooking and heating since they arrived to the area in winter.

Later, however, the Front prohibited IDPs from cutting the trees down and continued razing large numbers itself. The faction systemically harvested logs in wide-reaching areas and made a business of the wood it sold on the markets in A'zaz.

Several local sources STJ met with said that humanitarian and relief organizations procured bundles of the logs the Front sold to offer them as firewood to IDPs in northern Syria, ignoring the reports local organizations published covering the issue of illegal logging in the Afrin region.

A resident of the Qatmah IDP Camp (witness 1) that STJ interviewed in early December 2022 provided an exclusive account of the logging practice in the area:

"In 2022, after an IDP camp was established in the Qatmah forest area, the camp residents began chopping trees down to use the logs for cooking and heating. The camp expanded with every new batch of IDPs, and more trees disappeared. The IDPs cut down the trees under the watch and with permission from the Levant Front/al-Jabha al-Shamiya because it controls the forest area and has several military posts and

² It is led by Fahim Issa, commander of the Sultan Murad Division. It comprises of the division, the Sham Legion/Faylaq al-Sham- North Sector, the 9th Division, the 112th Division, The Northern Brigade/Liwa al-Shamal, the Suleiman Shah Brigade (also known as al-Amshat), the Mu'tasim Division, the al-Hamza/al-Hazmat Division, the Muntasir Billah Division, The Northern Hawks Brigade, Thuwar al-Sham/ Rebels of the Levant Brigades.

checkpoints there. The Front was cutting trees down simultaneously and systemically. [The Front's members] even dug up the roots of the trees."

Another resident of the camp (witness 2) whom STJ interviewed in early December 2022 narrated:

"In 2020, IDPs from rural Ma'arat al-Numan, in Idlib province, established the al-Bashayer Camp. Because the Levant Front/al-Jabha al-Shamiya controlled the area, it allowed them to construct the camp on a plot in the forest, which it had already cleared of trees. Finally, in 2022, the camp was deemed official. Therefore, the two organizations, Bahar and Onsur, started distributing aid to residents, dug a well, and assigned the camp an administration."

For his part, a high-ranking officer from the Levant Front/al-Jabha al-Shamiya (source 3) commented to STJ about the logging practice in the forest area. On the condition of his anonymity, the officer narrated that the Levant Front/al-Jabha al-Shamiya practices logging for two ends:

"[The Front] cuts down trees for two reasons: first, to obtain firewood, which guard posts and military centers use for heating; second, for trading purposes. The Front tasks groups of its members to chop down the trees in Qatmah and then allocate lumber to its posts and centers. The front allocates the members who carry out this task bounces. The Front rewards these members because they save it the costs of buying fuel—even though it has a huge storage of fuel since it controls the al-Hamaran crossing, through which fuel leaves the territories the Syrian Democratic Forces control."

The officer added:

"Muhammad Wajed al-Dibo, known as Abu Wajed Menagh, is the person in charge of logging. He is the logistics officer of the Levant Front/al-Jabha al-Shamiya. He oversees the distribution of firewood to military centers and guard posts and the bounces to the members [commissioned with cutting trees down]."

The officer added:

"For the commercial logging, the logistics officer, Muhammad Wajed al-Dibo, contracted with a merchant to remove tree roots and sell them. Additionally, al-Dibo prohibited IDPs from entering the areas where the Levant Front/al-Jabha al-Shamiya practices logging to ensure they will amass the largest quantities possible of timber. Lately, the Sultan Murad Division entered the area after the Front's withdrawal. The civilians resumed logging along with the division's members. Military vehicles of the division transport and sell the harvested logs."

A second high-ranking officer from the Levant Front/al-Jabha al-Shamiya (source 4) also commented on the practice of logging. On the condition of his anonymity, the officer narrated:

"The forest was already open for civilians, who logged the trees due to poverty and extreme cold. Then, the Levant Front/al-Jabha al-Shamiya set up a system for logging. With the permission of its Commander, Abu Ahmad Nour, the Front delegated a high-ranking officer, Ahmad Zaidan and known as Hajji Hraytan, to carry out systemic logging operations. The Front made a deal with a new contractor for each plot they cleared of trees. The contractor would remove the tree roots in return for 250 to 400 USD paid to Hraytan for every truck he loads."

Expanding on the role of Hajji Hraytan, a high-ranking officer from the SNA's 3rd Legion (Source 5) recounted:

"Hajji Hraytan is the same officer who established a housing village in the Qatmah Forest. He obtained special funding and built the village to house IDPs from the Hraytan area in coordination with [the Front's commander] Ahmad Abu Nour. He initiated the construction work in 2021. Several families reside in completed buildings in the forest."

Notably, the Qatmah Forest was also a site for multiple fires, which civilians started as they set up fires to cook or during picnics. Commenting on the issue, a farmer from Qatmah (witness 6) narrated:

"In the summer, the camp people started going on picnics in the forest and built fires. Some left the place without properly putting the fire out, causing several fires in the forest."

To verify the logging practice in the Qatmah Forest, STJ sent a field researcher to the area. The researcher obtained visuals that corroborate the accounts provided by the interviewees. Moreover, STJ matched the footage with satellite images of the forest. The images demonstrated the following:

Logging started between 2018 and 2019.





6 Feb 2018





Other satellite images demonstrate the expansion of the logging area in 2021.





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Additionally, STJ obtained exclusive live images of the Qatmah Forest over the last three months of 2022 and matched them with satellite imagery.









The photo shows the stumps of several trees cut down in an Afrin forest patch. Credit: STJ.

Bafilyoun Forest

The <u>Bafilyoun Forest</u> is located in a joint control area. The Levant Front/al-Jabha al-Shamiya controls its eastern section, while the Sultan Murad Division and the Sham Legion/Faylaq al-Sham control its western part, close to the Ameriyeh village.

The Levant Front/al-Jabha al-Shamiya has been extensively cutting down trees in the forest's eastern section for commercial purposes since 2020. In 2021, the Front relocated IDPs from an informal camp established on a plot of land affiliated to the Bab al-Salameh border crossing to the forest, particularly the areas where it had already chopped trees down and removed their roots.

For insights into the logging practice in this area, STJ reached out to a resident of the Bab al-Salameh IDP Camp (source 7). He recounted:

"[The Levant Front/al-Jabha al-Shamiya] prevented civilians from cutting trees down in the Bafilyoun Forest, alleging that they wanted to damage the green cover of Syria. However, later, we were surprised that the Front began cutting the trees down, not sparing the roots even. In 2021, the Front suggested giving each IDP in Bab al-Salameh camp a plot of land in the forest to construct a house on it and live there, on the condition that [they] build a fence around the respective plots [they] are granted. The Front proposed to allocate each IDP a piece of land of 200 or 400m. The IDPs refused to register for the plots, except for nearly 400 families who applied, got the plots, and did fence them. The Front promised the people that [humanitarian and relief] organizations would later construct the houses for them. However, no organization has shown interest in the matter, and the plots remain unchanged."

A fighter from the Levant Front/al-Jabha al-Shamiya and an IDP from Tall Rifaat city (source 8) narrated:

"The Levant Front/al-Jabha al-Shamiya provided the people with plots of land and dug wells there. It told [the IDPs] that the organizations were uninterested in the issue and asked them to build the houses themselves. The Front's urge to evacuate the Bab al-Salameh camp zone stems from its desire to set the area's commerce into motion."

Elaborating on the logging practice in the Bafilyoun Forest, a high-ranking officer from the Levant Front/al-Jabha al-Shamiya (previous source) said:

"The Levant Front/al-Jabha al-Shamiya wanted to clear the Bab al-Salamah Camp to turn it into a trading arena and profiteer from it. Regarding logging in the Bafilyoun Forest, the Front oversaw the removal of large swathes of the forest's vegetation to offer the area to IDPs in Bab al-Salamah Camp. Members from the Front cut the trees down and distributed a portion of the harvested logs to Front-affiliated military centers while they sold the larger amount to merchants and lumber mills in A'zaz city."

To verify the logging practice in the forest surrounding Bafilyoun village, STJ deployed a field researcher to the area. The researcher obtained visuals that corroborate the accounts provided by the sources. Moreover, STJ matched the footage with satellite images of the forest. The images demonstrated the following:

Satellite footage showed extensive logging in the forest surrounding <u>Bafilyoun</u> <u>village</u> between 2018 and 2019.











27 Sep 2019



3 Oct 2020



12 Feb 2023

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The live images of the site corroborated the satellite images, which showed forest patches entirely cleared of trees and rendered barren.



Kafr Janeh Forest

The satellite images STJ obtained document the adverse impact the logging practice had on the forest areas surrounding the villages of <u>Kafr Janeh</u> and <u>Masha'alah</u>, which have been ongoing unabating since June 2018.

Several sources provided STJ with exclusive accounts about the issue, saying that the Sultan Murad Division and the Sham Legion/Faylaq al-Sham led the logging operations in this forest area, cutting trees down to supply their military centers with firewood or to sell logs for revenues.

Investigating the logging practice in this forest area, STJ deployed a field researcher to the targeted patches. The researcher obtained visuals that corroborate the accounts provided by the sources. Moreover, STJ matched the footage with satellite images of the forest. The images demonstrated the following:

Satellite images show the obliteration of the forest patches near Masha'alah village.







12 Feb 2023

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Mount Barsa Forests

Similar to several of the locations above, the Levant Front/al-Jabha al-Shamiya established a monopoly over the forest areas in <u>Mount Barsa</u>, cutting down trees for commercial purposes. The Front sold the harvested logs to merchants in A'zaz while it denied the area's locals access to the forest to collect firewood.

In an exclusive interview in the first half of December 2022, a civilian (source 9) narrated:

"The IDPs collected branches from the mountain for heating and cooking throughout 2019. However, in 2020, the Levant Front/al-Jabha al-Shamiya denied them entry to the area under orders from Abu al-Mu'tasim, a high-ranking officer. The Front then started cutting the trees down and selling the logs."

Expanding on the logging practice in Mount Barsa, a high-ranking officer from the Levant Front/al-Jabha al-Shamiya (source 10) recounted:

"In 2020, Abu al-Mu'tasim, a high-ranking officer, started logging trees in Mount Barsa. The workers who cut the trees down were fighters from the Front. The logging operations were organized. Additionally, [the Front] relocated harvested logs and sold them to lumber merchants in A'zaz. Some of the cut trees would be transferred to a lumber mill operated by the Front. In the mill, the logs are split into smaller pieces, which [the Front] then distributes to centers and guard posts."

The officer added:

"There is a Turkish military base on the other side of the mount. The Turkish military had repeatedly expelled fighters from the Levant Front/al-Jabha al-Shamiya while trying to cut trees down in that area. The military warned them not to return because they had planted the area with land mines to protect the base. The mines have set the forest aflame several times. The fires often expanded and devoured large numbers of trees because fire trucks had difficulty accessing the area."

In the context of Türkiye's presence in the region, PAX revealed there "are a few dozen cases of Turkish military outposts that have been constructed amidst orchards, resulting in hundreds of trees cut down for both the base itself and fire-line clearance around the military outposts." The organization backed this claim with a satellite image, comparing the tree density in Afrin near Kefer Mize before and after a Turkish military post was established.



Investigating the logging practice in Mount Baras forest, STJ deployed a field researcher to the area. The researcher obtained visuals that corroborate the accounts provided by the sources. Moreover, STJ matched the footage with satellite images of the forest. The images demonstrated the following:

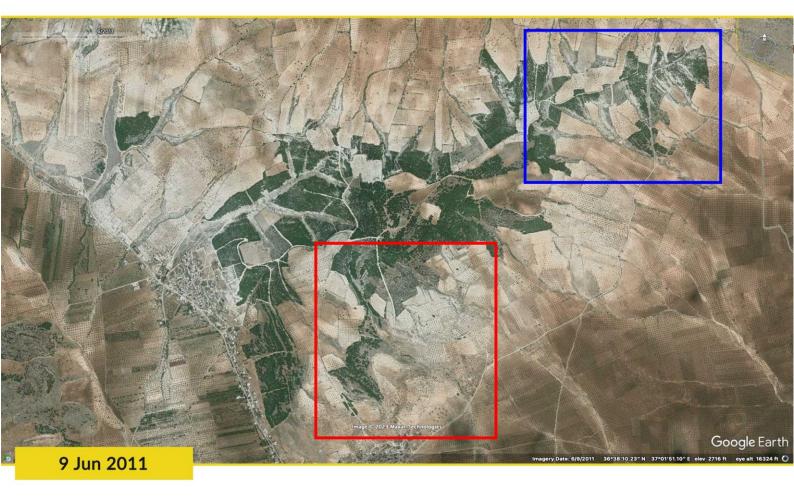
This forest patch witnessed restrained logging operations before the armed opposition groups entered the Afrin region in 2018, as it was an active combat spot. STJ documented that the People's Protection Units (YPG) cut down a few trees to dig trenches and build fortifications, particularly at the top of the mount.

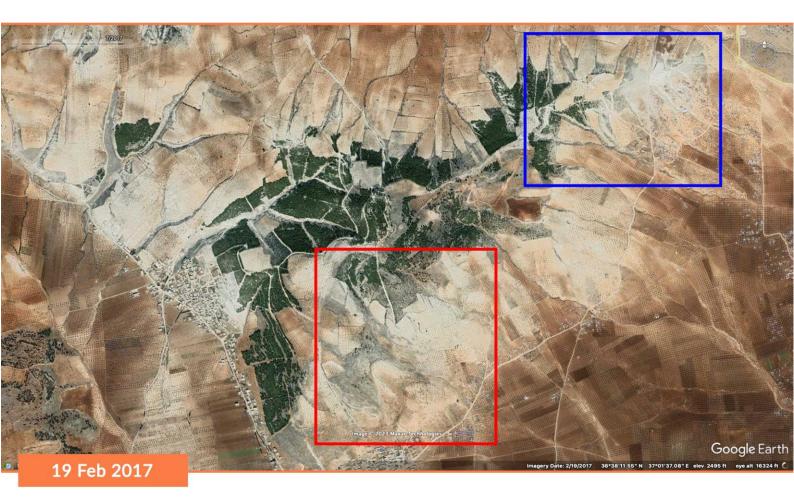
A satellite image showing some fortifications made by the YPG between 2011 and 2016.





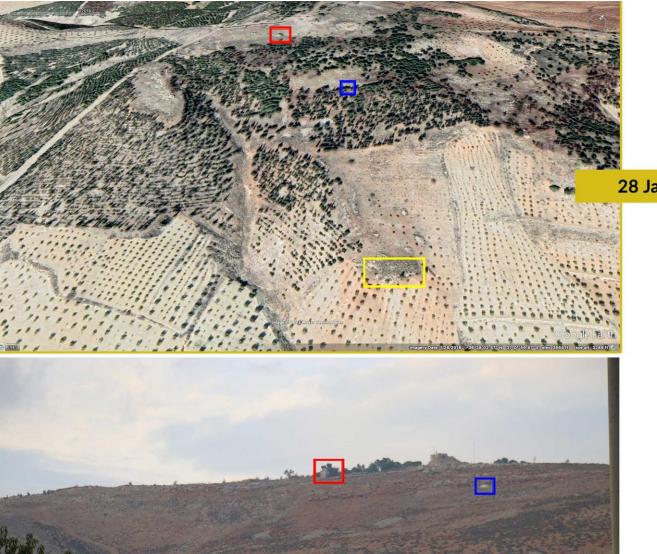






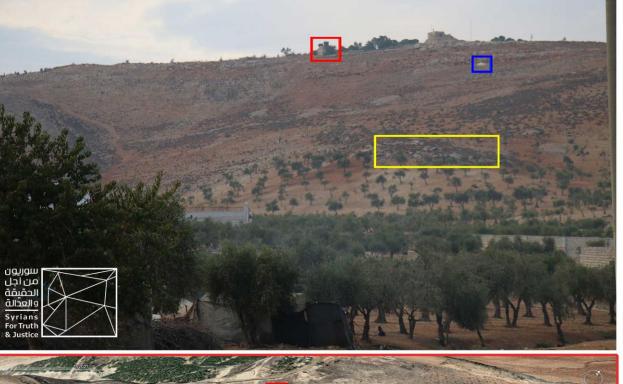
The blue and red boxes demarcate the areas that witnessed illegal logging operations before 2018. These areas were overwhelmingly under the control of the Syrian armed opposition factions. The spots on the opposite side suffered limited tree-cutting operations. The YPG felled the trees to dig fortification trenches.







28 Jan 2018







Posted by the <u>A'zaz Media Center</u>, the two photos show the depletion of the tree cover in Mount Barsa in 2020 compared to 2013.





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Taken between 6 February 2018 and 11 February 2023, the two images show the disappearance of trees in Mount Baras, on the summit of which the Turkish military built outposts.







©MAXAR

A closer shot of the Turkish military outpost on the summit of Mount Barasa.



Qatirah Forest

The Sultan Murad Division maintains an extensive presence in the forest surrounding Qatirah village, near <u>Lake Maydanki</u>, along with armed sub-groups of the Sham Legion/Faylaq al-Sham and Elite Army/Jaysh al-Nukhba. All these armed groups are involved in the logging business. However, the Division remains the party most active in cutting trees down as it has almost complete control over the area. An administrative official from the Sultan Murda Division (source 11) provided STJ with an exclusive account of the logging operations the Division leads in the area. On the condition of his anonymity, the source narrated:

"The General Command of the Sultan Murad Division, led by Fahim Issa, oversees the logging practice in the Qatirah Forest. Issa assigned personal delegates to run the matter on his behalf. These are Nassir al-Nahar, Abu Sariyah al-A'kaidi, Abu Alaa A'barah, and Abu Sahbi. From their side, the Sham Legion/Faylaq al-Sham and Elite Army/Jaysh al-Nukhba have assigned the matter to the high-ranking officer, Abu al-Nour, and General Commander, Mu'taz al-Rslan, respectively. Initially, fighters from the Division handled the tree cutting. Then, the Division's Command decided to hire a contractor to complete the work faster. The contractor hires civilians who cut trees down day and night. The contractor also transports the logs on motorcycles."

In an exclusive account about logging in the area, a resident of the Qatirah village (source 12) narrated:

"At the beginning of winter in 2019, the civilians collected branches for heating for several days. Then, the Sultan Murad Division arrested two individuals on logging charges. The Division released them in exchange for a ransom [bribe] of 600 USD each. The Division opted for the arrests to intimidate the civilians so they would not approach the area. Later, the Division began to cut the trees down regularly. They traded in the cut trees and sold them."





Screenshot from a <u>video</u> posted by the Afrin Local Council in October 2020, showing the trees surrounding Lake Maydanki.



Screenshot from a <u>video</u> posted on 21 August 2021 showing the gradual disappearance of the trees surrounding Lake Maydanki. Credit: A'zaz Local Council.



Screenshot from a <u>video</u> posted by media worker Obeida al-Hayani in March 2023. The photo shows the complete obliteration of some tree patches around the Maydanki Dam.









Several <u>Telegram channels</u> posted a video of logging in the vicinity of the Maydanki Dam. They accused the SNA-affiliated Sultan Murad Division of eradicating the tree cover in the area.



Merged screenshots from a <u>video</u> posted in August 2023. It shows individuals in military uniforms cutting trees in the vicinity of the Maydanki Dam.

A Syrian TV <u>channel</u> also accused the Sultan Murad Division of practicing illegal logging, stressing that Lake Maydanki is controlled by the Hayat Thaeroon for Liberation, under which the Division operates. Additionally, journalist <u>Faiz al-Doghim</u>, who works with the opposition's Syria TV, posted a <u>video</u> on 31 August 2022. He said that "thousands of trees were cut down in a matter of hours" and questioned the fate of a nearby forest patch.



Screenshot from the tweet by Syria TV correspondent, Faiz al-Doghim.

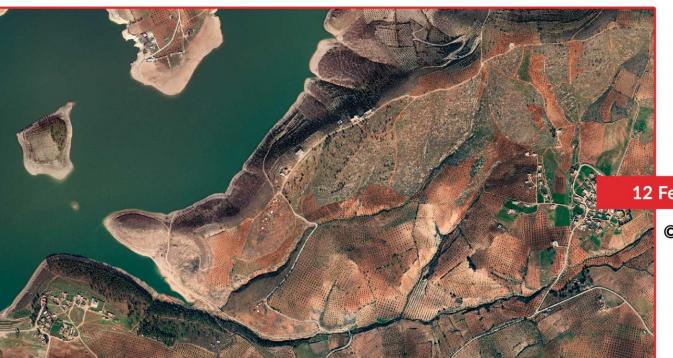




6 Feb 2018



27 Sep 2018



12 Feb 2023

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The Illegal Logging Market

Several sources STJ interviewed gave matching accounts about how the perpetrators market the cut trees. They confirmed that the factions sold one of the tree loads to timber merchants in A'zaz city, north of Aleppo. Notably, several merchants and brokers represent the involved factions in the city. They dispose of the logs by selling them to relief organizations to distribute as firewood to IDPs or smuggling them to GOS-held areas.

On the issue of marketing, an officer within a relief organization (source 13) said:

"We used to purchase logs and wood from the A'zaz market to distribute to IDP camps. We bought logs cut down from the Barsa Forest. We used to buy freshly cut logs because they are less costly than dried wood. This is why the Levant Front/al-Jabha al-Shamiya denied people access to Mount Barsa. The Front cut down the mount's trees and sold them to organizations, which would distribute them in aid to IDPs."

For his part, an administrative official from the Sultan Murad Division (source 14) narrated:

"The harvested logs are sorted out before they are sold. Quality timber is sent to Turkey for industrial uses. Lower-quality logs are sold to firewood merchants after they are transported to A'zaz. A portion of the firewood is trafficked into GOS-held areas. It is first relocated to al-Bab city and then to Tadef city. Merchants working with the GOS-affiliated 4th Division handle the transport from Tadef and on."

A firewood merchant in A'zaz city (source 14) narrated:

"In A'zaz, one kilogram of firewood is sold for 2.5 to 3 Turkish Liras (TL). In GOS-held areas, the kilogram is sold for twice that sum. Therefore, large quantities of firewood are trafficked from the region to GOS-held areas for double the revenues. Firewood is trafficked through two [internal] crossings: Tadef crossing—controlled by the Sultan Murad Division, and Bassouta crossing—controlled by the Sham Legion/Faylaq al-Sham and the al-Hamza/al-Hamzat Division."

Legal Opinion

The forest trees, the subject of this report, are considered public assets belonging to the Syrian State. The tree cover holds this status regardless of the ruling political regime or the government controlling the country. It also maintains the same standing regardless of a particular party's political stance towards this regime or government—especially since the forest trees are not vehicles or materials that, by their nature, could be part of the war machine in the country or assist in the war effort, as is the case with military equipment, for example. Additionally, international law regards forest wealth as "public property."

Therefore, the seizure, cutting down, and selling of these trees without the prior official approval (license) of the Syrian State—while such licenses remain challenging to obtain in the present time due to the chaos gripping the country and because several areas, including those the report covers, are outside the control of the Syrian State—is considered a theft of public money (assets belonging to the Syrian people). Notably, Article 8 of the Syrian Economic Criminal Code No. 3 of 2013 stipulates, "Whoever steals or embezzles or misappropriates public funds shall be punished with at least five years imprisonment."

According to the interpretation of International Humanitarian Law (IHL), these practices of destruction or appropriation of public property, unless they are justified by military necessity, are considered illegal and may amount to a war crime, whether in an international armed conflict³—given the existing state of occupation—or a non-international armed conflict,⁴ under the current armed conflict in which are engaged the factions mentioned in the report and the Syrian State.

The approach of IHL, and accordingly International Criminal Law, to dealing with environmental protection and the obligations of the parties in the conflict in this context remains limited. The human-centered nature of IHL is one of the challenges perpetuating this limitation, even though several international treaties and provisions have led to the development of International Environmental Law, which aims to promote environmental protection at all times as one of the primary conditions for human survival. Despite this limitation—represented by the rare relative provisions in IHL treaties, such as Articles 35 (3) and 55 of Additional Protocol I to the Geneva Conventions, Customary International Humanitarian Law now deals with the protection of the natural environment during armed conflict as a binding duty on all parties in the conflict.

Rules 43, 44, and 45 of the ICRC's Customary IHL database address these duties and argue that they apply during international and non-international armed conflicts. Rules 43 and 44 deal with the duties of protecting the environment during hostilities and military operations in general and focus on the duty to apply the basic principles of IHL (discrimination, proportionality, and precaution) concerning the impact of such actions on the natural environment during the conduct of hostilities and the use of relevant means and methods of warfare.

What is striking about the cases monitored in this extensive report is that the logging operations were not, in any case, related to direct hostilities or military operations in general and therefore are not related to the military necessity imposed by the battlefield. Accordingly, the targeted forest areas are clearly civilian objects that must be protected in general and as part of the natural environment that must not be caused to suffer widespread, long-term, and severe damage, as stipulated in Rule 45 of customary IHL.

Moreover, if we assume that cutting trees and trading in their timber in one way or another relate to strengthening the war effort of the parties involved in logging by securing financial resources or heating for the fighters and the like, in that case, it is more likely that the principle of proportionality has been violated, given that the concrete and definite military advantage of this procedure is not commensurate with the expected damage. We could argue that the criteria in Rule 45 (widespread, long-term, and severe damage) are all met in their practices. As the facts in the report show, logging operations are not limited to a specific place or time but are systematically expansive and carried out over a continuous time frame and verifiable as broad.

Furthermore, destroying the forest cover on such a large scale has long-term environmental consequences, which may last for decades. As for the risk, there is no exact formula to measure it. However, it is proven—even in peacetime—that the excessive use of the natural environment and its resources has dangerous repercussions for the ecosystem itself and humans, of course.

Notably, environmental protection is closely related to the human enjoyment of many other rights. Therefore, the danger inherent to the vast and systemic obliteration of the forest also lies in its impact on the right to life, health, food, water, decent living standards, and others,

³ Rome Statute, Article 8.2.b.xiii.

⁴ Rome Statute, Article 8.2.e.xii.

referenced by the <u>Framework</u> Principles on Human Rights and the Environment developed by the Special Rapporteur on Human Rights and the Environment.

Even though the term "environmental genocide" is still nascent and is not considered a reflection of customary international law, the demand for its adoption as an international crime is increasing, and the effort around that is remarkable. In June 2021, the Independent Expert Panel on the Legal Definition of Ecocide proposed a <u>legal definition</u> to be added to the articles of the Rome Statute establishing the International Criminal Court. They suggested the following:

"Ecocide means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts."

Notably, the proposed definition does not require proving the elements of widespread, long-term, and severe damage in tandem. It is, instead, sufficient for the effect to reach the threshold of any of these elements for the act to be considered environmental genocide. Acts are considered "unlawful" within this definition if they are prohibited by national and/or international law, with the emphasis that no national law presumes to legitimize any acts prohibited by international law. Given the relevant provisions of Syrian law and international law, there is no doubt that the actions carried out by the parties mentioned in this report are unlawful. Therefore, these acts must—at the very least—be documented nationally and internationally and by UN-concerned entities, even if environmental genocide is yet to be identified as an international crime.

In addition to these environmental considerations, forest wealth remains a civilian object protected under IHL. Therefore, it should not be targeted unless it has turned into a military objective that meets the criteria stipulated in the IHL provisions in that it, by its nature, location, purpose, or use, contributes effectively to military action and simultaneously, if its total or partial destruction or acquisition as it was providing such contribution brings about a definite and tangible military advantage to the attackers.

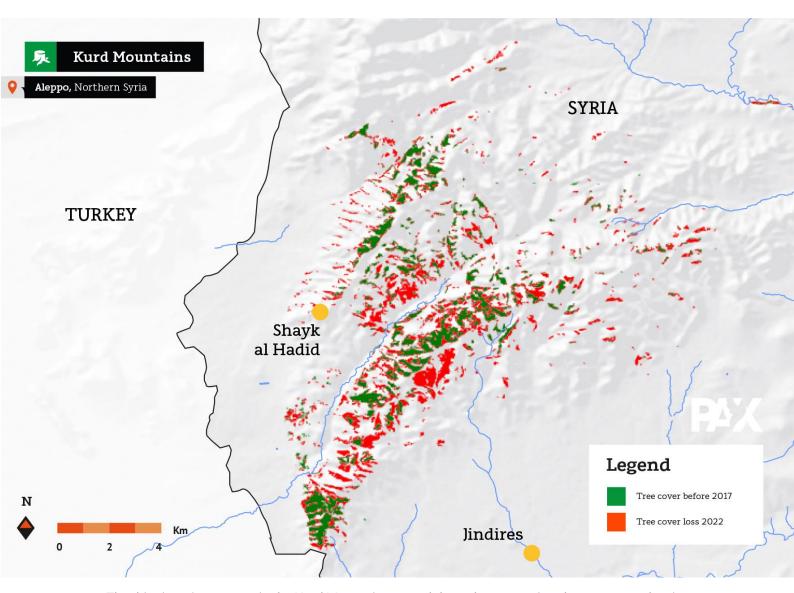
During the reporting period, which witnessed the end of active hostilities in the territories of Operation Olive Branch in general, and in the areas covered in the report in particular, it must be assumed that the threshold for meeting these criteria became higher. Therefore, any justification for targeting this forest wealth must prove conclusively that the assault can achieve a definite and concrete military advantage for the parties listed in the report. Before that, it must be corroborated that the targeting contributes effectively to the military power of the opponent. However, obtaining such proof is—logically—unachievable because all the sites mentioned in the report are already under the control of the parties involved in logging and trafficking operations without any active hostilities in these sites. Additionally, the condition of military necessity—if any—is followed by the condition that it be "urgent" according to what was established by several international judicial rulings.⁵

Accordingly, the destruction or appropriation of such public property without meeting these criteria combined may amount to the war crime of destroying or appropriating an adversary's property, according to the Rome Statute establishing the International Criminal Court.

⁵ For example, ICC, Prosecutor v. Katanga, "Judgment pursuant to Article 74 of the Statute", ICC-01/04-01/07-3436-tENG, 07 March 2014, para. 893.

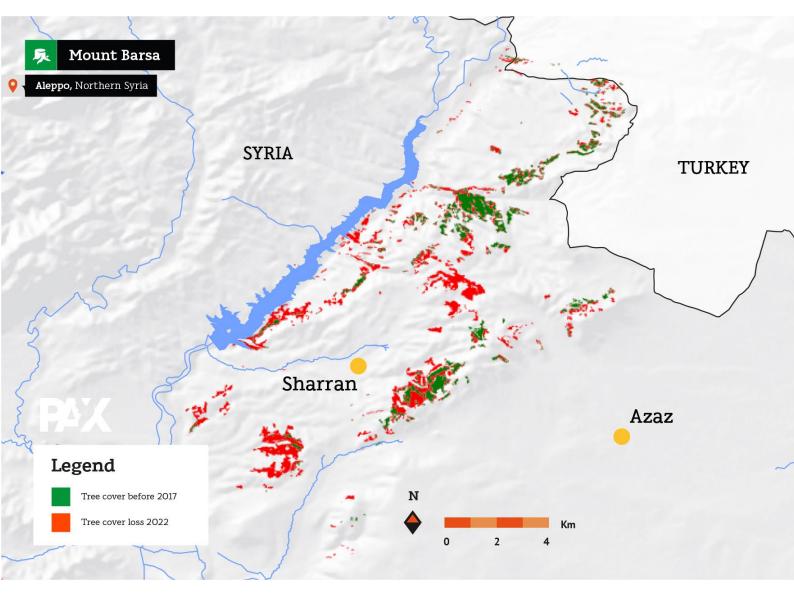
In addition, the fact that the factions mentioned in this report "cut down forest trees" for trade is considered a crime punishable by Syrian Forestry Law No. 6 of 2018. Article 32 of the law inscribes "imprisonment from six months to two years and a fine from five hundred thousand to one million against whoever, without prior authorization, uproots, cuts, damages, or mutilates trees and shrubs in the State's forests, or performs any action that leads to their destruction." This provision is somewhat similar to the text of Article 47 of the Forestry Law No. 25 of 2007, repealed by Law No. 6 of 2018.

In the cases monitored in this report, the penalty applicable to the perpetrators of the crime (cutting down and destroying forest trees) is the one stipulated in the Economic Criminal Code being the most severe, under the provisions of Article 42 of the Forestry Law No. 6 of 2018. The article states, "If another law stipulates a penalty for the same act that is more severe than the penalty stipulated in this law, the harsher penalty shall be applied."



The thinning of tree cover in the Kurd Mountains, traced through a comparison between tree density before 2017 and in 2022. Credit: PAX.

In Mount Barsa, one of the deforestation spots STJ thoroughly investigates, the PAX-initiated remote-sensing analysis uncovered that "1,082 hectares, covering over 59 per cent of the total area of forest, was cut down between 2018 and 2021."



The thinning of tree cover in the Mount Barsa, traced through a comparison between tree density before 2017 and in 2022. Credit: PAX.

Other Logging Locations

Based on data from open sources and satellite footage, the digital forensic expert identified other (15) sites as active logging centers, especially since the evidence STJ collected corroborated systemic logging operations across the Afrin region after 2018.

The table below locates the additional logging centers identified by the digital expert:

#	Geolocation	District/Area	Faction in	Other Factions in the	Logging Time
			Control	Area	Frame
1	<u>,36.595504</u> <u>36.866561</u>	Sharran/Kafrum	Sultan Murad Division	The Sham Legion/Faylaq al-Sham -Elite Army/Jaysh al-Nukhba- The Northern Hawks Brigade	2019
2	,36.578090 36.900782	Sharran/ Qūrt Qūlāq (al-Dib al-Kabir)	Sultan Murad Division	The Sham Legion/Faylaq al-Sham -Elite Army/Jaysh al-Nukhba- The Northern Hawks Brigade	2019
3	<u>36.562173</u> <u>36.881968</u>	Sharran/Qara Tepe/ Qastal Kishk	Sultan Murad Division	The Sham Legion/Faylaq al-Sham -Elite Army/Jaysh al-Nukhba- The Northern Hawks Brigade	2019
4	<u>36.647652</u> <u>36.934062</u>	Sharran/Juman	Sultan Murad Division	The Sham Legion/Faylaq al-Sham -Elite Army/Jaysh al-Nukhba- The Northern Hawks Brigade	2019
5	36.521208 36.853031	Center (Afrin/Tal Ziyadiye)	al-Hamza/al- Hamzat Division	Ahrar al-Sharqiya/ Free Men of the East- The Sham Legion/Faylaq al- Sham-Sultan Murad Division- The Levant Front/al-Jabha al- Shamiya- The Mu'tasim Division	2018
6	<u>,36.427501</u> <u>36.863289</u>	Center (Afrin/Bassouta/Kafir)	al-Hamza/al- Hamzat Division	Ahrar al-Sharqiya/ Free Men of the East- The Sham Legion/Faylaq al- Sham-Sultan Murad Division- The Levant Front/al-Jabha al- Shamiya- The Mu'tasim Division	2018
7	<u>36.638690</u>	Jindires/ Kafr Safra/Amal Village	The Eastern Army/Jaysh al- Sharqiya	Ahrar al-Sharqiya/ Free Men of the East -The Liwa Samarkand/Samarkand Brigade -The Sham Legion/Faylaq al-Sham	2018
8	<u>,36.435594</u> <u>36.658741</u>	Jindires/ Kafr Safra/Shykh Mhammad	The Eastern Army/Jaysh al- Sharqiya	Ahrar al-Sharqiya/ Free Men of the East -The Liwa Samarkand/Samarkand Brigade -The Sham Legion/Faylaq al-Sham	2019

\sim	0/ 400004	1:1:/11.1.1.1		Al	2020
9	,36.438004	Jindires/ Hekjeh	The Feet and	Ahrar al-Sharqiya/ Free	2020
	<u>36.628461</u>		The Eastern	Men of the East -The Liwa	
			Army/Jaysh al-	Samarkand/Samarkand	
			Sharqiya	Brigade -The Sham	
				Legion/Faylaq al-Sham	
10	<u>,36.402690</u>	Jindires/Ishkan		Ahrar al-Sharqiya/ Free	2020
	<u>36.612347</u>	Gharbi	The Eastern	Men of the East -The Liwa	
			Army/Jaysh al-	Samarkand/Samarkand	
			Sharqiya	Brigade -The Sham	
				Legion/Faylaq al-Sham	
11	<u>,36.462471</u>			Ahrar al-Sharqiya/ Free	2019
	<u>36.653665</u>	Jindires/Qazaqleh	The Eastern	Men of the East -The Liwa	
		Tepe/Tatara	Army/Jaysh al-	Samarkand/Samarkand	
			Sharqiya	Brigade -The Sham	
				Legion/Faylaq al-Sham	
12	,36.461162	Jindires/Brim		Ahrar al-Sharqiya/ Free	2019
	36.687219	Forest/Battal Forest	The Eastern	Men of the East -The Liwa	
			Army/Jaysh al-	Samarkand/Samarkand	
			Sharqiya	Brigade -The Sham	
				Legion/Faylaq al-Sham	
13	,36.482004	Jindires/Kourdan		Ahrar al-Sharqiya/ Free	2020
	36.689268		The Eastern	Men of the East -The Liwa	
			Army/Jaysh al-	Samarkand/Samarkand	
			Sharqiya	Brigade -The Sham	
				Legion/Faylaq al-Sham	
14	,36.500444			Ahrar al-Sharqiya/ Free	between 2019
	36.644648	Jindires/Ramdana	The Eastern	Men of the East -The Liwa	and 2022
			Army/Jaysh al-	Samarkand/Samarkand	
			Sharqiya	Brigade -The Sham	
				Legion/Faylaq al-Sham	
15	,36.487824	Shaykh al-Hadid/Haj	Suleiman Shah		2020
	36.630362	Hassan	Brigade (also	Suleiman Shah Brigade	
			known as al-	(also known as al-Amshat)	
			Amshat)	,	

Forest Patch Near Kafrum

The satellite images STJ obtained demonstrate that logging in this spot started in 2019. Other photos showed the complete eradication of the area's tree cover by 2023.





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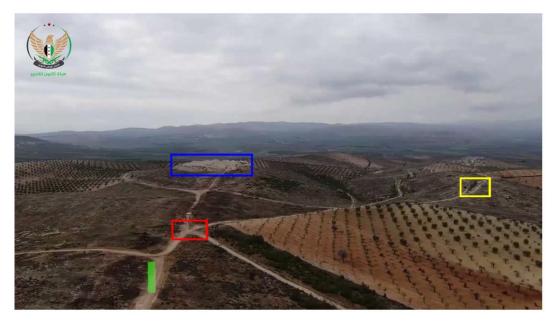


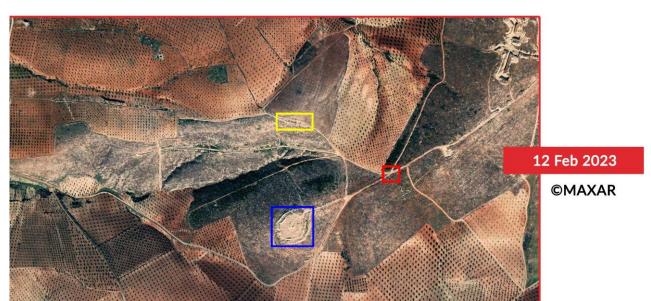


Forest Patch Near Qurt Qulaq (al-Dib al-Kabir)

The satellite images STJ obtained show that logging became rampant in this location after 2019. Notably, the YPG had built a military outpost in that spot and cleared trees over a small area in 2017.











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Forest Patch Near Qara Tepe/Qastal Kishk

The satellite images showed that logging in this area started in 2019.











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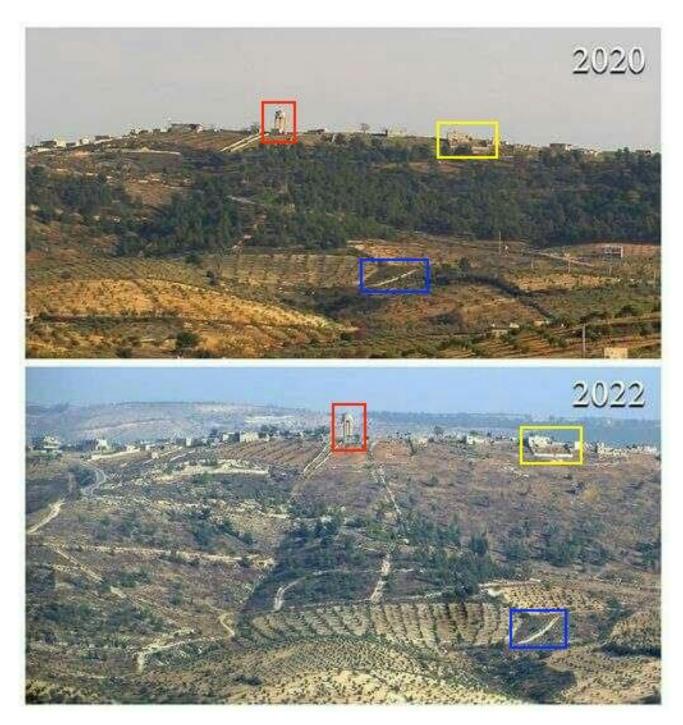




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Forest Patch Near Juman

Satellite images show that logging in this location started in 2019.



Posted by local activists, the two photos show tree cover depletion in the mentioned spot. <u>Source</u>.







Forest Patch on Top of Tal Ziyadiye (Afrin Center)

Satellite images show that the logging practice started in 2019 and continued affecting all the trees on the hilltop.









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Forest Patch Near Bassouta/Kafir (Afrin Center)

Satellite images show the logging practice started in 2019. Later, the al-Hamza/al-Hamazt Division, an affiliate of the SNA, built an outpost in the area.







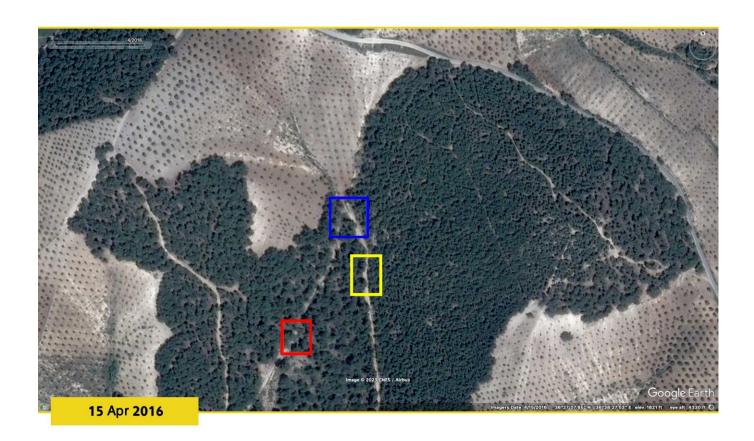


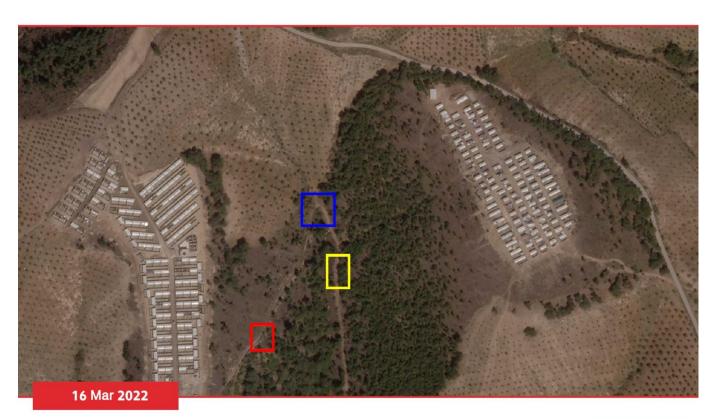




Forest Patch Near Kafr Safra (Jindires)

The tree cover on this hilltop was cleared for building an <u>illegal housing settlement</u>.









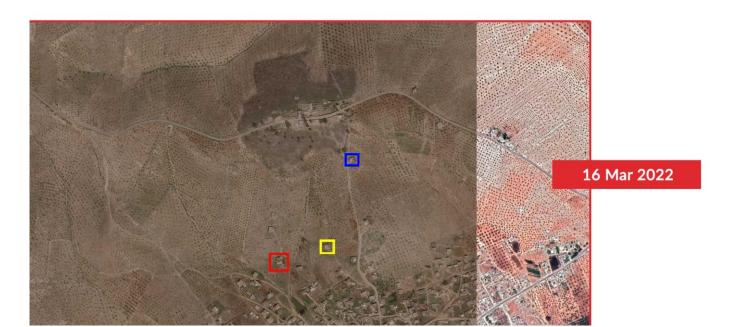




Forest Batch on a Hilltop Near Kafr Safra (Shykh Muhammad)









The YPG established this cemeterv in 2017.





Forest Patch Near Hekjeh/Jindires

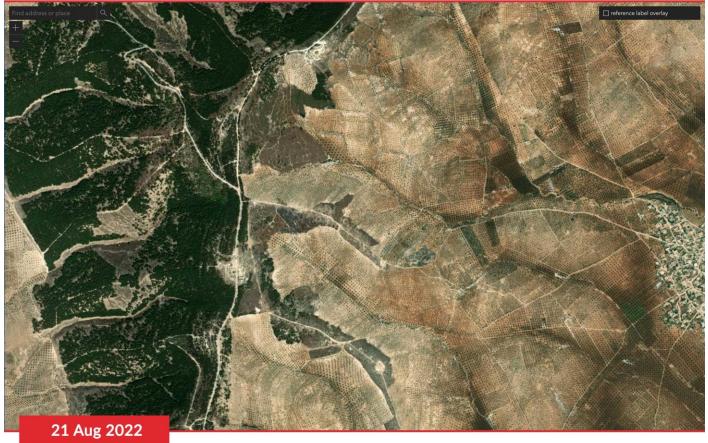






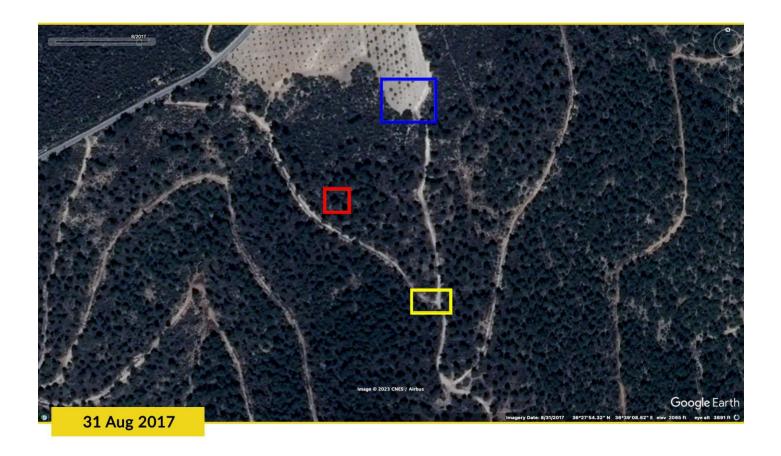
Forest Patch Near Ishkal Gharbi (Jindires)

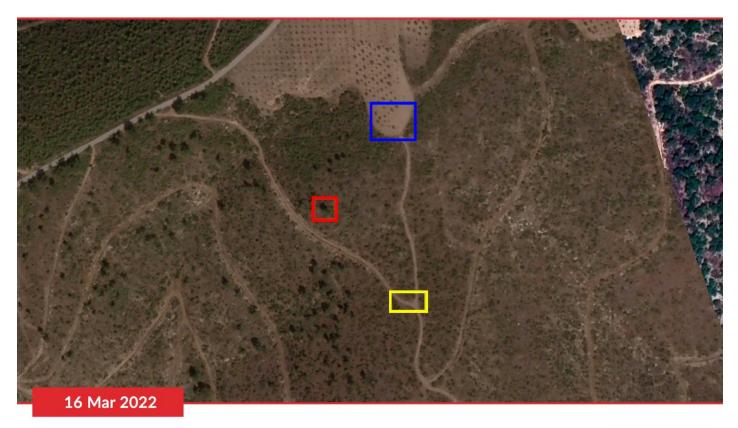






Forest Patch Near Tatara (Jindires/Qazaqleh Tepe)







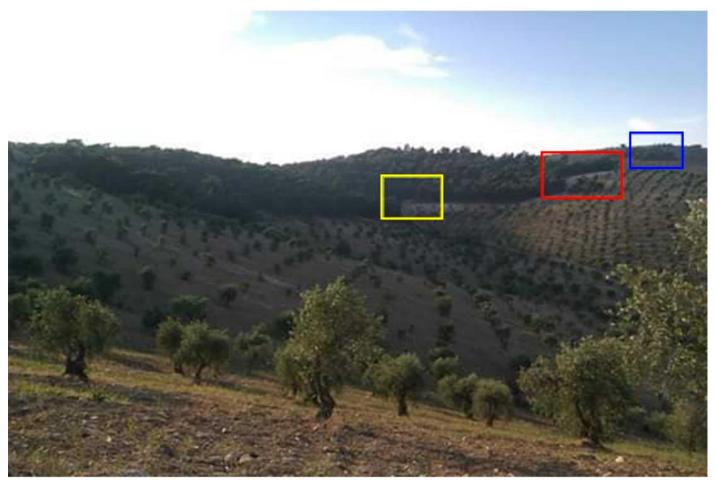








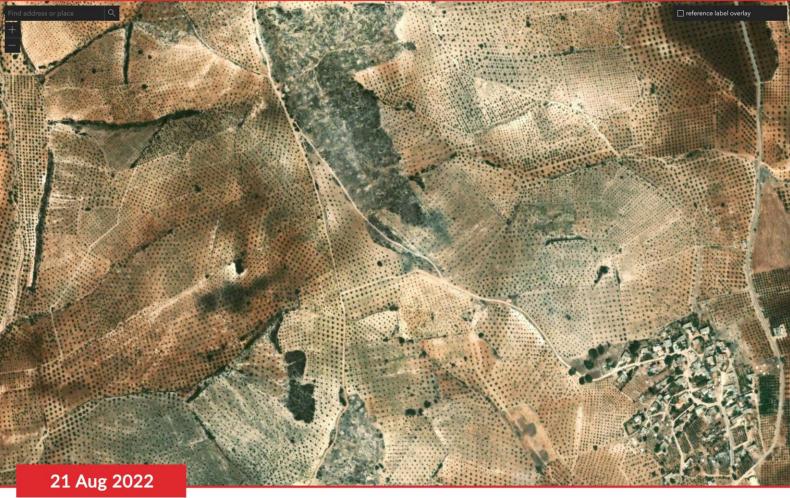
Brima/Battal Forest Patch in Jindires













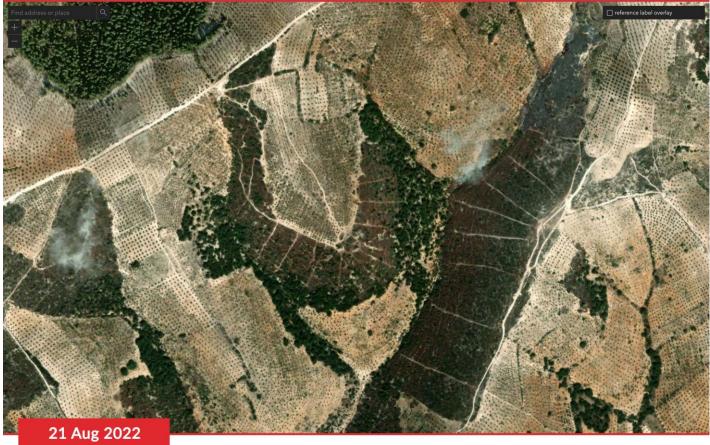






Forest Patch Near Kourdan (Jindires)







Forest Patch Near Ramdana (Jindires)







Forest Patch Near Haj Hassan (Shaykh al-Hadid)







About partners

About LELUN:



A group of daughters and sons of Afrin, lovers of its soil, loyal to its olives, and our belief in the history of the fathers and grandfathers, and in fulfillment of their efforts and struggle in preserving the human being, the land and the trees, and in order for the trees to return to their splendor, and for the families and loved ones to return to their mountains, plains and homes, it was necessary to launch The ground is being prepared for the return of rights to their owners and the pursuit of justice.

The goal of justice for the victims was the main stimulus that generated us; Young women and men of Afrin who are jealous of its people, people and land, regardless of their nationality, sect, background or political affiliation, to establish an association for the victims of violations in this Afrin under the name "Lilon", to extend a helping hand to the affected women on an equal footing. by defending them.

About STJ:



Syrians for Truth and Justice (STJ) is a nonprofit, nongovernmental organization monitoring human rights violations in Syria. Founded in 2015, STJ has been based in France since 2019.

STJ is an impartial and independent Syrian human rights organization operating across Syria. Our network of field researchers monitor and report human rights violations occurring on the ground in Syria, while our international team of human rights experts, lawyers, and journalists gather evidence, examine emerging patterns of violations, and analyze how violations break domestic Syrian and international law.

We are committed to documenting violations of human rights committed by all parties in the Syrian conflict and elevating the voices of all Syrians victimized by human rights violations, regardless of their ethnicity, religion, political affiliation, class, and/or gender. Our commitment to human rights monitoring is founded on the idea that professional human rights documentation meeting international standards is the first step to uncovering the truth and achieving justice in Syria.