

Raising goats to support black grouse

Balance sheet 2022

On the plot above the Col de la Croix, where 18 goats were put in 2021, 17 goats and 9 youngsters browsed the vines in 2022. These beautiful fawn-coloured goats instinctively passed their legs over the shrubs on the way down, which enabled them to eat the green alder up to the top and thus to have a consequent action of leaf removal from the invading shrub. However, the weather forced the shepherdess to bring them down earlier in the season than planned. The goats came down on 9 September instead of 9 October and therefore did not cut into the bark.

The work for the farmer was much more substantial in 2022 than in 2021 because the proven presence of the wolf prompted her to bring the goats in every night. No predator attacks were recorded in the Arpillles, which means that the project can be continued with the owner of the goats in 2023. The 4^{ème} wire set up for the wolf allowed the goats to be safe during the day and quiet in the stable at night.

Between checking the fences, fetching the goats in the evening and taking out the manure every week, the farmer estimated her work at 1.5 hours per day. With the help of an agricultural advisor of Prometerre¹, compensation was therefore requested from the Canton of Vaud so that she be compensated for the work overload caused by the wolf.



As explained to a member of the National Council who asked about the remuneration of the farmer, no budget has been foreseen to pay the shepherdess as this project is based on an exchange of good practices. The closure of alpine pastures is a real issue for Swiss farmers. Agroscope defines the problem of the expansion of green alder both at the agronomic and ecological level. In addition to reducing the fodder quality of the alpine pastures, green alder promotes soil acidification and increases greenhouse gas emissions. Because of its density, this shrub reduces plant and animal biodiversity. Several initiatives therefore exist to reduce the presence of green alder and goats are known to be an effective small ruminant against this shrub.



Apart from the hard work caused by the presence of the wolf, the shepherdess is therefore happy to look after goats that are supposed to reopen the pastures. They are livestock that she likes and the contact with the owner of the *Cols fauves* has been very good. Unlike last year, the goats were well wormed and the farmer was incredibly surprised when the goats returned as they had 0% worms which he has never seen. It is indeed known that tannin is anti-parasitic as it creates an unfavourable environment for worms in the intestines. However, it should be noted that the summer of 2022 was very dry, unlike 2021 which was very rainy, which probably also had an effect on the health of the animals.

¹ Vaud association for the promotion of earthen crafts.

Duration of browsing

Given that the goats were brought down in September and that the bark was not eaten away, it is planned to have the vines browsed by goats on this parcel of the Arpilles mountain pasture for at least two more years so that the vines do not grow back in this area. Afterwards, a new parcel of land on this mountain pasture above the Col de la Croix could be fenced off.



It is planned to reproduce this protocol on other mountain pastures in the canton of Vaud and Bern in order to reach the target of 10 ha by 2040. The logistics manager is in contact with a Vaudois breeder and Bernese women breeders may also participate in the project.

Investment

The logistic manager of the project went 5 times to the alpine pasture (setting up the stakes, meeting the hunters, etc.). He also presented the project to the member of the National Council in Gstaad with the coordinator. He travelled a total of 310 km, which represents 220 CHF of travel. He did not have to unpack the park because the shepherdess decided to take care of it herself. She took all the stakes into the barn for fear that they would be damaged. It should also be noted that she used smarth-fences (4-wire reels) to separate the pen into 20-metre wide strips. She did this to make it easier to collect the goats in the evening as the fences prevented them from scattering. The goatherd also explained that when the pasture is soiled, the goats do not want to eat. The farmer therefore took the initiative to move the goats every week and left the pens empty for 15 days to ensure that the parasites died in the parts of the pen where the goats had been. At the end of the summer, the farmer opened the whole pen for the goats to skin the vines in the whole plot but the lack of grass forced the shepherds to bring the cattle down earlier than expected (cows and therefore goats). The last 10 days, two billy goats were put with the 17 goats for breeding and the farmer noticed that they ate less (grass as well as shrubs).

Adding in the fact that the goats were brought in and the manure taken out, the work of the shepherdess was 130 hours over 87 days in 2022, whereas it was 30 hours over 2 months in 2021. This represents a minimum of CHF 3,400² which was taken over by the Canton of Vaud as an aid to coexistence with the wolf.

Despite the fact that he lives in the canton of Fribourg, more than 100 km from the alp, and that he had to make three journeys (straw, bringing the animals up and taking them down), the owner of the goats said that he really appreciated the experience and wanted to do it again next year without any financial assistance. Indeed, the farmer was very happy to entrust his animals to a farmer who loves goats and cares about their welfare. In the past, he had had a caretaker who was not very conscientious and his goats had run away because of poorly maintained pens. He was therefore reassured to have a meticulous farmer who knows the goats, which is not always the case with the shepherds who do the summer pastures.

² The shepherdess estimates that this work is worth CHF 1.50 per day per goat (26 including the 9 young ones), which amounts to CHF 3,393. The goat farmer even thinks that this work is worth CHF 5,000 for the summer pasture, as it is a lot of work to take out the manure every week. The request was made on the basis of the number of animals by the Prometerre advisor, who indicated that the compensation should be between CHF 4,000 and 6,000.

10 volunteers joined an installation day that took place on 6 June 2022. As well as re-installing the park and watering hole, the meeting redefined the ambitions of the project, which aims to bring together all stakeholders and be recognised by the state and all conservation bodies.

The project leader spent 60 hours coordinating and monitoring the experiment with the various players (farmer, breeder, promoter, logistician, etc.) and drafting the descriptive documents for the project, which represents 5,800 CHF. 469 CHF were spent to complete the existing material (stakes, insulators, reels, handles) during the installation on 6 June 2022. Between 2021 and 2022, CHF 12,424 was spent on 2021 and 2022.

The 10 hunters who came on Whit Monday said that they were motivated to help voluntarily in the future. The participation of candidate hunters was also mentioned. It should be pointed out that the farmer has reinforced the fence by mowing all around it and has added more than 40 posts to ensure that the wolf cannot get under the wires.

Action for 2023

Now that the breeder-shepherd duo is operational for Les Arpillés, it is a question of finding other serious goat breeders and seeing where other goats could be valued. A goat keeper from Vaud has been contacted and finds the project interesting. In order to avoid an overload of work, it is planned not to bring in the goats but to try to keep them outside at night, as the logistics manager did in 2022 with his own goats without any problems. Sponsorship of goats could be considered but it is necessary to find a goat keeper who has the infrastructure to ensure the wintering of the goats.

Creation of an association:

The objective of the Association Alpine Tetrao Tetric (A.A.T.T.) is to bring together all the knowledge that exists to combat the green alder in order to reopen the mountain pastures on shaded slopes and to increase the breeding places of the black grouse. Gathering knowledge on the different control methods developed will allow a centralisation of information in order to create quality information supports fed by scientific data.



The black grouse is an emblematic bird known to most of the general public. As a symbol of the mountains, it is a very good ambassador to raise awareness about the closure of alpine environments and the reduction of mountain pastures. The black grouse needs a heterogeneous vegetation where it finds food in the pastures and shelter to nest in the closed areas. The expansion of green alder reduces this mosaic of environments, reducing them to shady, acidic soil. Information about this is essential to maintain the biodiversity of the mountain pastures. Funding will be sought so that the project can expand and become a real observatory of the practices tested to combat green alder, in addition to acting with goats on 10 ha invaded by vines by 2040.

A member of the National Council asked the president of SCI Helvetia to pay the shepherdess. He himself comes from a dairy farming family and is a strong advocate of mountain skills, and believes that wealthy people like SCI Helvetia can pay the shepherds for their work. Once he understood the principle of reopening the alpine pastures by removing the vines through a give-and-take between goatherds and farmers, he found the project very interesting. The help of the hunters in financing and setting up the goat pastures is also very advantageous for the farmers.

He mentioned that the dock is also an invasive plant that is widespread in this alpine pasture and the work to remove it is important. He said that he would welcome help from Mrs Gander to reduce this weed. It is an action that must be carried out by applying a recognised product to each plant and which could be entrusted to two of the volunteers if necessary.

The Alpage des Arpilles is very overgrown with unwanted weeds according to him. Between the dock, the ferns and the green alder, he is afraid that after Mr. and Mrs. Gander, the alpine pasture will be abandoned by the breeders or will be taken over by a shepherd with few cattle. This would result in the enclosure of the environments above the Col de la Croix, which would be unfortunate for the biological diversity of Les Diablerets.

Given that the contract for the alp lasts 6 years, and that the end of the contract is in 2024, Mrs Gander remarks that she does not know if they will renew and that it will depend on their health. It would therefore be wise to follow up the farmers who might be selected by the commune to take over the Arpilles mountain pasture. A Highland cow farmer could be interesting as Agroscope has shown that these are hardy animals that are satisfied with low quality fodder and have a strong mechanical action on the shrubs. To be continued. A better bibliographical knowledge of the tests carried out in Switzerland against vernal grass will allow a reflection on this subject.

Finally, it will be necessary to gather enough volunteers to put the park back in place in the Arpilles, possibly act on the dock, and fence a new park in another mountain pasture. The creation of the Alpine Tetrao Tetrix (A.A.T.T.) association will make it possible to open up participation to all types of volunteers in order to bring together hunters and other mountain pasture lovers for an action favourable to the biodiversity of which the black grouse is a symbol.

