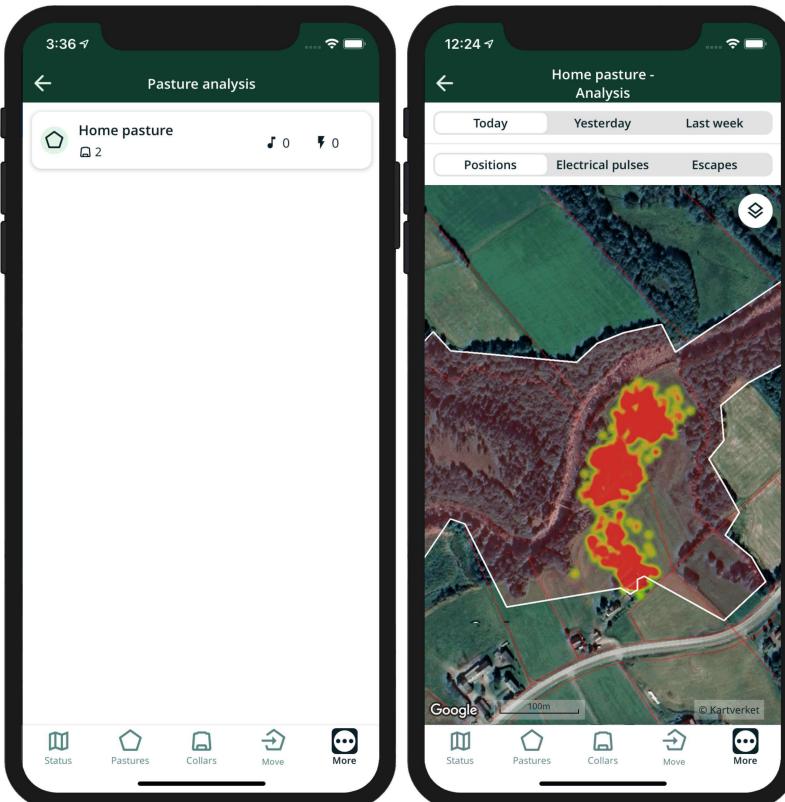


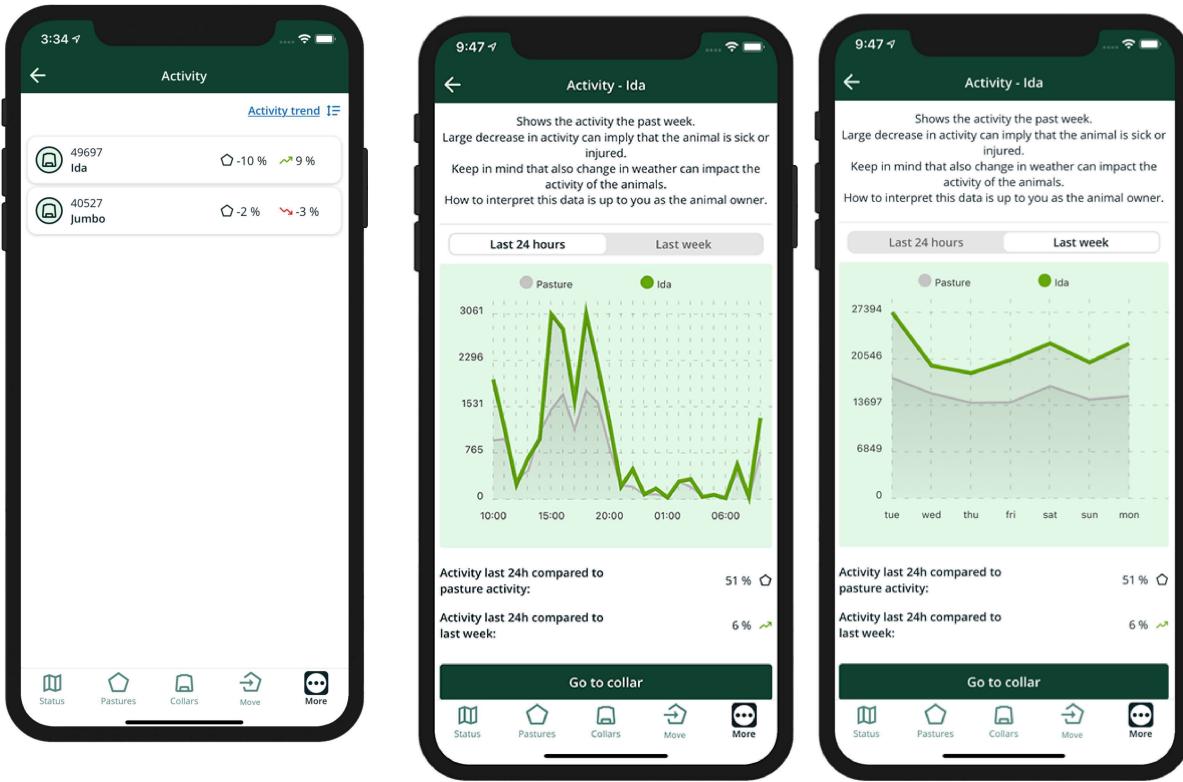
## Pasture analysis

Pasture analysis gives an overview of logged positions, electrical pulses and escapes on pasture level. Sort by today's date, yesterday's date and last week. The data is visualized in a heat map, which can be useful for analysis and optimization of the pasture.



## Activity

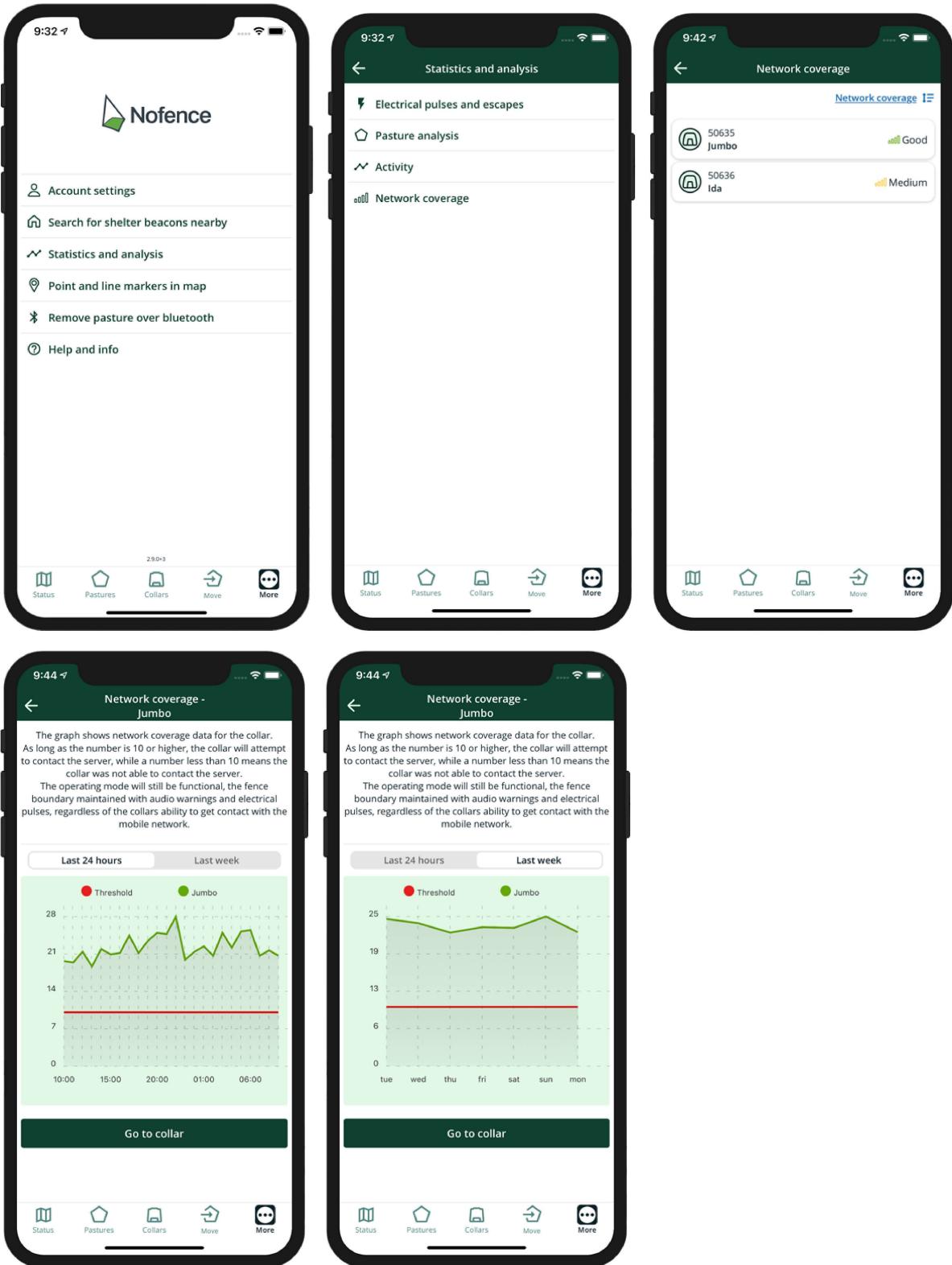
This section provides statistics that show the animals' activity levels. **Sensor data gives you information about the collars activity over the last 24 hours and well as the last week, and compares this with the activity of the other collars in the same pasture during the same time period.** If you notice significant changes in activity, this may be a sign of illness or injury, and the animal should be checked on.



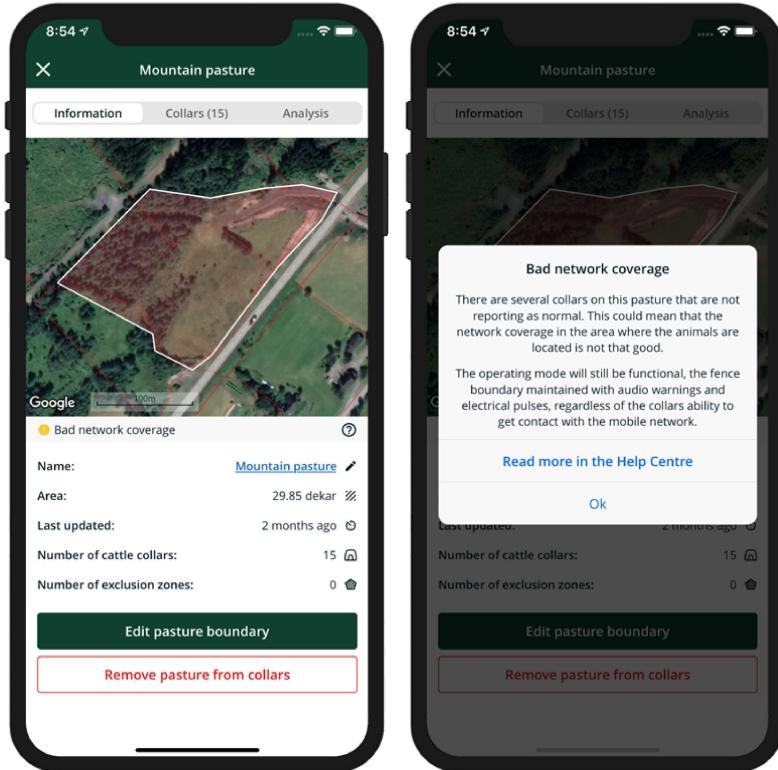
## Mobile network coverage

Although it may not be straightforward to know if an area has good or poor mobile coverage, the collar logs data which provides more accurate information about this. Choose Network coverage under the Statistics and analysis section to see if the collar has spent time in an area of poor, medium, or good mobile coverage for the past 24 hours or week.

The red line marks the point where the collar is no longer able to connect to the server via the mobile network (reporting). If the collar is unable to send you information via the mobile network, its icon turns yellow in the app. Note that the collar may very well still have the operating mode intact and will emit audio warnings and electric pulses as per normal even though they are unable to deliver reports. When the collar is back in an area with sufficient mobile coverage, it will start reporting again.



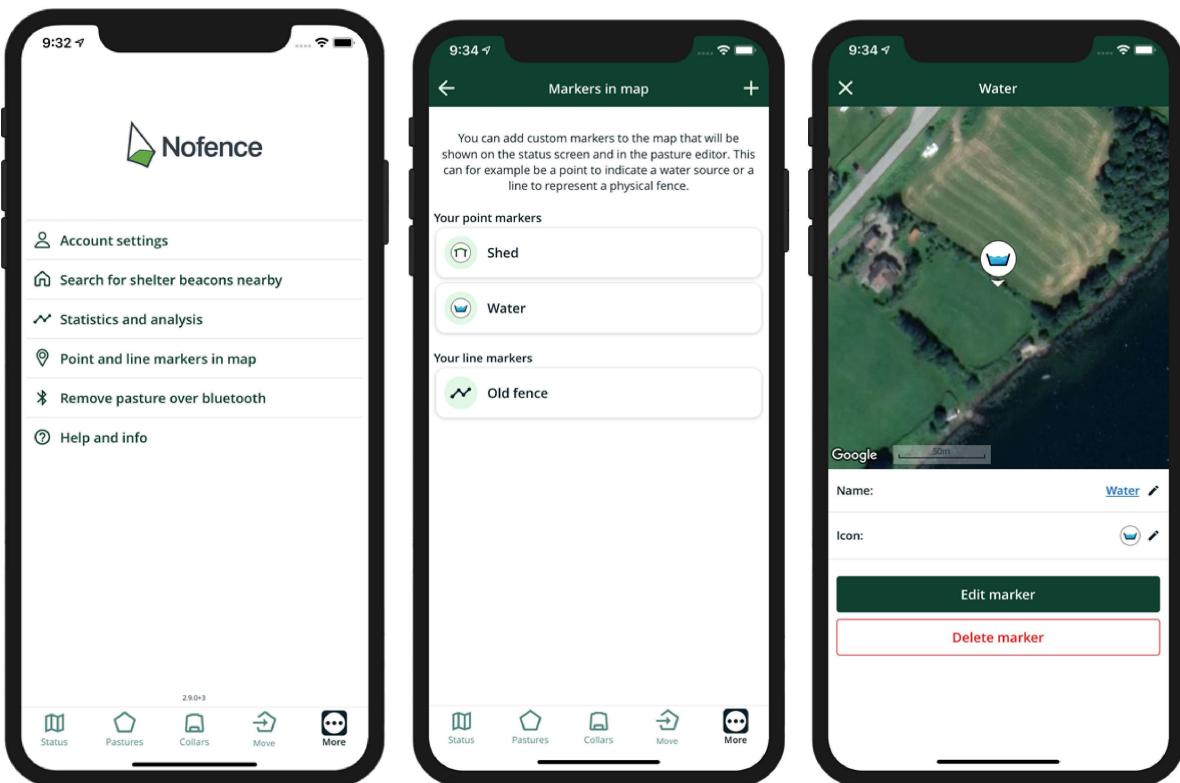
You will also receive information about poor mobile coverage on a pasture level. If the majority of collars in a pasture report having poor mobile network conditions, a pop-up window will notify you of this.

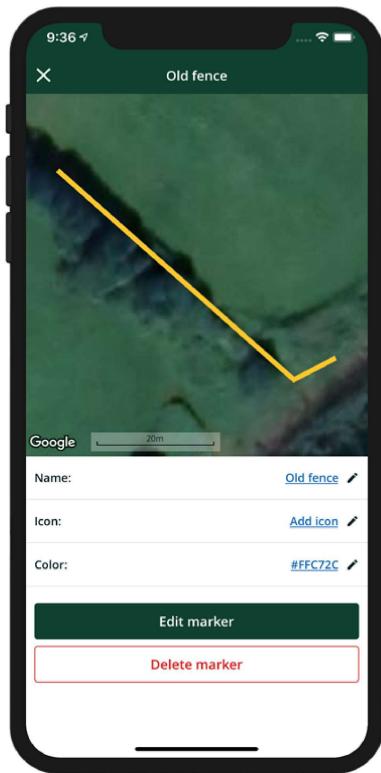


## 4.6.5. Point and line markers in map

If you want to mark the spot where the watering trough or salt block is located in your pasture, use the custom map markers and lines option. The icons will show in the map on the status screen and in the pasture editor.

Go to “More” in the main menu and select “Point and line markers” in the map. Then, press the “+” icon on the top right of the screen and choose which marker you want to add. Press on the map to place your marker and save on the top right of the screen. You can select different icons as bullets that illustrate the item you are adding and choose the color of the lines so that they are easy to see. Then tap “Save” at the top right.

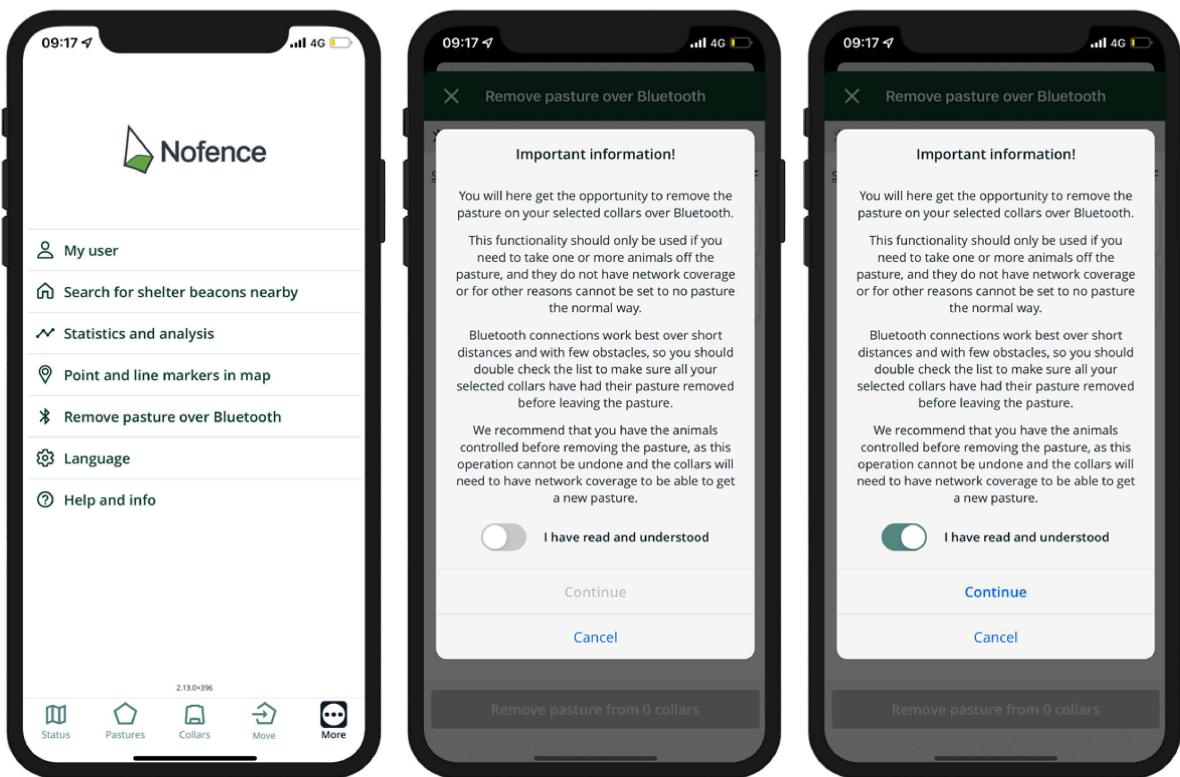


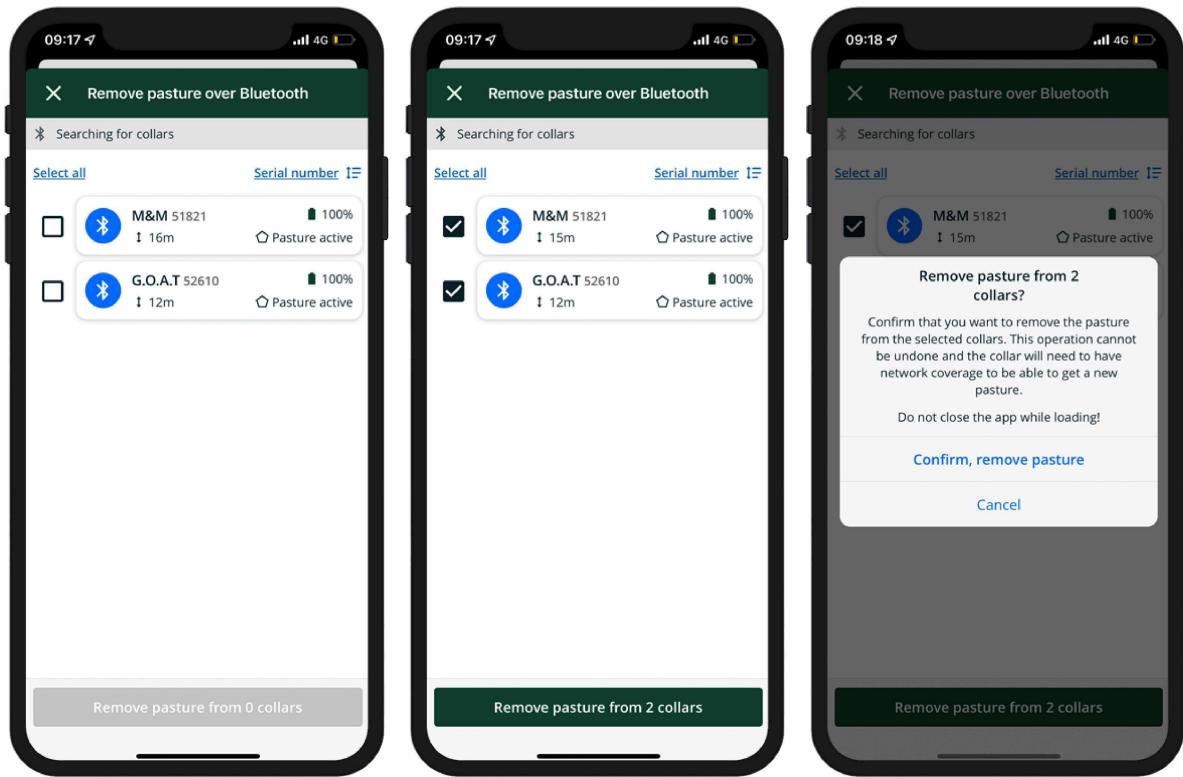


## 4.6.6. Remove pasture via Bluetooth

! Removing the pasture via Bluetooth is an emergency function, and should only be used in cases where you do not have sufficient mobile coverage. Please note that you will not be able to switch the virtual fence back on before both the collars and your phone are within an area with mobile coverage.

By using this function, you will have the option to remove the pasture from the collars via Bluetooth regardless of mobile coverage, for example if you are bringing the animals back home from the mountain pasture.





Contact via Bluetooth works best at short distances, and with minimal obstacles affecting the signal. You should therefore make sure that all collars have switched off the fence successfully, before you start removing the animals from the pasture.

We recommend having control of your animals before you switch off the fence, as this action cannot be undone. The collars will need to have mobile coverage to be able to be assigned to a new pasture.

### How to remove the pasture via Bluetooth



Please note that in areas without mobile coverage, your user data in the app will not be visible. However, you will still be able to open the app and remove the collars via Bluetooth.

1. Open the app and go to More
2. Click Remove pasture over Bluetooth
3. Read Important information, and tick the box to confirm that you have read and understood. Then click Continue
4. All collars in the nearby area will appear in the list. Select the collars you want to remove from the pasture. Confirm by clicking on the green button in the bottom of the screen. Read the information carefully, and click on Confirm, remove pasture. Do not close the app before it is finished loading!
5. When the pasture has been removed via Bluetooth, a confirmation will appear in the app. In the collar list, it will say with red letters that the collar has been removed from the pasture. The virtual fence is now disabled, and it is safe to physically remove the collar from the pasture.

Please note the following:

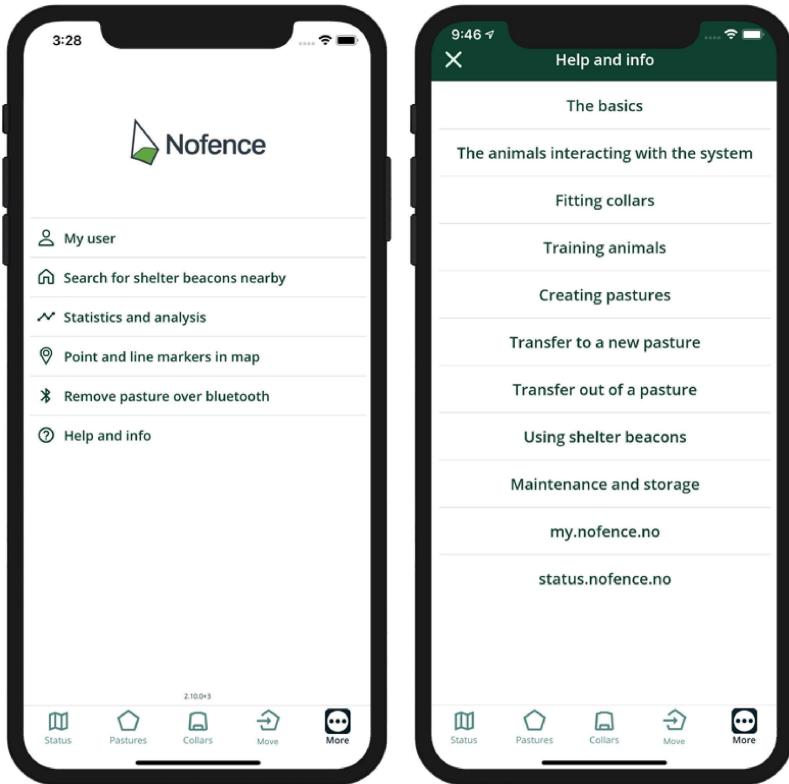
- If your phone has mobile coverage, but the collar is not reporting, the collar will still appear in the

Assigned list, but with red letters informing that the pasture has been removed via Bluetooth.

- As soon as the phone is within coverage, and the collar is reporting, the app will move the collar to the Not assigned list. The red text explaining the pasture has been removed via Bluetooth will still be visible. The text will disappear as soon as the collar is reporting as normal.

## 4.6.7. Help and Info

In the Help and info section we have gathered a selection of topics from the user guide. These topics will provide answers to the most frequently asked questions from our customers, and are great to have easily accessible as you progress with your Nofence journey.



## 5. Maintenance

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Regular maintenance of the collars is important to ensure proper functioning and long lifetime of the collars. In this chapter you will find our recommendations on how to best take care of your collars.

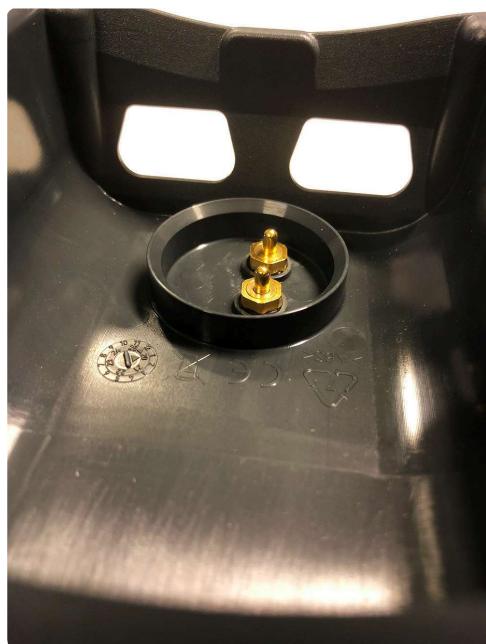
Maintain your collars to ensure longevity and stable functionality.

# 5.1. Maintenance and storage for sheep / goat collars

Maintain your collars to ensure longevity and stable functionality.

## When changing batteries:

- Remove dust and debris from the collar's battery slot
- Apply CRC 5-56 or WD-40 to the battery poles every time you charge the battery
- Apply CRC 5-56 or WD-40 to the collar's contact pins when needed
- See to it that the solar panels are not covered by something (fur, mud, etc.), as this will make the collars charge poorly



### CRC

Our recommendation is to use CRC 5-56 or WD-40 as a lubricant for the contact pins and battery poles. These products drive out humidity and protect the contact points from corrosion.

### The contact pins need lubrication

The contact pins providing contact between the collar and the battery are spring loaded. To ensure that they pop out easily, we recommend that you apply one of the products mentioned above using a cotton bud. You may also press the pins slightly in and out using something soft, such as cotton buds. We also recommend that you apply the same procedure to the battery poles every time you charge the battery. This will protect against corrosion.

## At the end of the season

- Move the collars in the app to "no pasture"
- Remove the batteries from the collars – this will turn the system off and usage costs are halted
- Rinse the collars (including the solar panels) in lukewarm water, and use a nylon brush such as a toothbrush. Alternatively, use cotton buds. Do not use chlorine as it damages the solar panels. If you wish to use disinfectant, we recommend Virkon S
- Charge the batteries; they are to be stored fully charged to ensure maximum performance and durability
- The collars and batteries should be stored in a dry and clean place at room temperature
- If you are using leather neck straps, they should be treated with leather care products so that they stay soft and last longer

## 5.2. Maintenance and storage for cattle collars

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### At the end of the grazing season

- Move the collars in the app to “no pasture”.
- Remove the battery from the collar.
- Clean the collars and batteries in lukewarm water, using a nylon brush such as a toothbrush. Do not use chlorine as this can damage the solar panels. If you wish to use disinfection, we recommend using Virkon S.
- Charge the batteries; they are to be stored fully charged to ensure maximum performance and durability
- The collars and batteries should be stored in a dry and clean place at room temperature

### Ahead of the new grazing season

- Make sure there is no dust or mud on the battery poles. Clean the poles using a cotton bud if needed.
- Apply Vaseline at the bottom of the battery poles. Vaseline should only be applied to the poles on each side of the battery (+ and -), not in the middle one. See picture below.
- The battery is now ready to be used.



## **6. Other**

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# 6.1. Troubleshooting

## The Nofence status page

For system info, go to the Nofence status page: <https://status.nofence.no/> . The app will notify you of any incidents in the status field.

Observation	Possible causes
! Missing report	<ul style="list-style-type: none"> <li>The battery has insufficient power levels</li> <li>Poor mobile coverage</li> <li>Lost or damaged battery</li> <li>The contact pins are stuck – check whether they pop out easily.</li> <li><b>Check if the collar starts reporting after a restart. (Remove the battery for 5 seconds and then put it back in the collar).</b></li> </ul>
The app shows the animals as being outside the Nofence pasture	<ul style="list-style-type: none"> <li>The animals can for some reason not feel the electric pulse</li> <li>Poor GPS conditions</li> <li>Dead battery</li> <li>The animals are on their way back to the Nofence pasture after a period of poor GPS conditions. Updating their positions may take a little time.</li> </ul>
The collar does not play audio warnings when it crosses the Nofence boundary	<ul style="list-style-type: none"> <li>The new Nofence pasture has not been downloaded to the collar</li> <li>The collar is not registered in any pasture</li> <li>Poor GPS conditions</li> </ul>
The collar reboots constantly	<ul style="list-style-type: none"> <li>Check the contact pins in the transition between battery and collar house. Make sure they pop out easily.</li> </ul>
The collar charges poorly	<ul style="list-style-type: none"> <li>The solar panels are covered by something (check for fur, mud, etc.)</li> <li>Do not use markers to write on the solar panels, it will affect the charging negatively.</li> <li>Oxidation of contact points. Perform maintenance.</li> <li>Damaged contact pins.</li> </ul>
The electric pulse does not work	<ul style="list-style-type: none"> <li>If you have leather straps, they may have turned upside down.</li> <li>If the chains on both sides come into contact with each other they will discharge the electric pulse.</li> <li>If you extend the neck strap make sure that the extender material is conducting.</li> <li>Thick winter fur can insulate the electric pulse.</li> <li>The chains fail to come in contact with the animal's neck. Check if the fit is too loose or if the animal's neck is very small.</li> </ul>
Missing push notifications on Android	<p>Many Android phones have power settings that may cause push notifications from the Nofence app to cease. If you notice that push notifications following electric pulses or escapes are missing, try the following:</p> <ul style="list-style-type: none"> <li>Make sure your phone does not restrict background data for the Nofence</li> </ul>

app. To do this, go to “Settings” and select “Apps”. Search for the Nofence app and select “Mobile data”. Make sure that both “Allow background data usage” and “Allow app while Data saver on” are switched on.

- Disable “Optimize battery usage” or add the Nofence app to the list of exclusions: Open “Settings” and select “Apps”. Find the Nofence app and go to “Battery”. The “Allow background activity” should be switched on. Then select “Optimize battery usage” and make sure that the Nofence app is not on the list of optimized apps.
- If you experience no push from the Nofence app on a Huawei phone, go to “Settings” and select “Advanced settings”. Go to “Battery” and make the Nofence app protected by marking it as a protected app.

## 6.2. The Nofence grazing map

In the [Nofence's official grazing map](#), people can view all Nofence collars and pastures within a 20km radius from their position. This can be helpful for people passing by the area, to avoid any unpleasant events between animals and humans.

Nofence have a grazing poster that informs about animals grazing in the area with collars, and that asks for caution. The QR code on the poster can be scanned to view the collars and pastures in the map. If your animals are grazing in a public area, we recommend using the poster to make this information easily accessible to people passing by. The posters are available in both Norwegian and English.

Please note that as a Nofence customer, none of your collars or pastures will be visible in the public grazing map before you have granted access yourself. To share positions and pastures in the map, as well as your own contact info, go to “My user” under the menu option “More” in the app and select “Data sharing”. You can then also have the poster sent to you on email.

