



# Categorize, graduate and colorize

QGIS 2.4 - WINDOWS 7 - AUGUST 2014

## Goal for this lesson:

In this lesson you will learn to categorize, graduate and change style and color of the data in attribute table. A thematic map can be visualized in many different ways. In this lesson a map will be categorized from 2 different fields and graduated with different values. So with data from one map, you are going to create tree thematic maps.

The steps are:

- Open project
- Look into attribute table
- Open Properties and change Style by Categorize
- Save project
- Duplicate layers
- Filter and change Style by Categorize
- Preview
- Open Properties and change Style by Graduate
- Save project

Data: agricultural\_field.shp if you have made Lesson 3. Else use AgriField2.zip  
Source: Markblok data from <https://kortdata.fvm.dk/download/index.html> (Translated and edited)

## Start lesson

Click on **Layers>Add vector layer** Choose **agricultural\_field.shp**

Open the attribute field Click on

You are going to colorize the polygons by values in the 'Category' field.  
Close the attribute table.

## Categorize, classify and colorize

Double click on the layer name  
Click on the Tab **Style**

Click on and choose

In Column choose **Category**

Click on

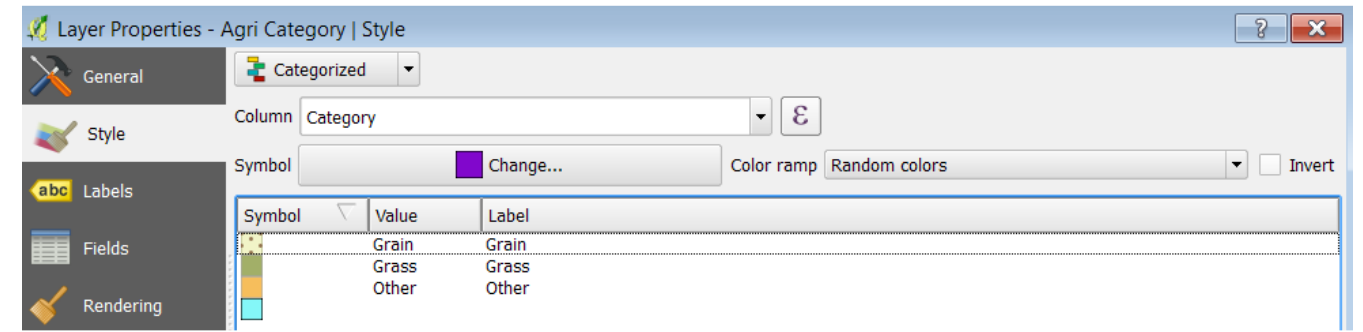
Classes for the values in the attribute table can be viewed.

If you want more categories, you can add additional values by clicking **Add** and then double click in the empty **Value** field and type the new value.

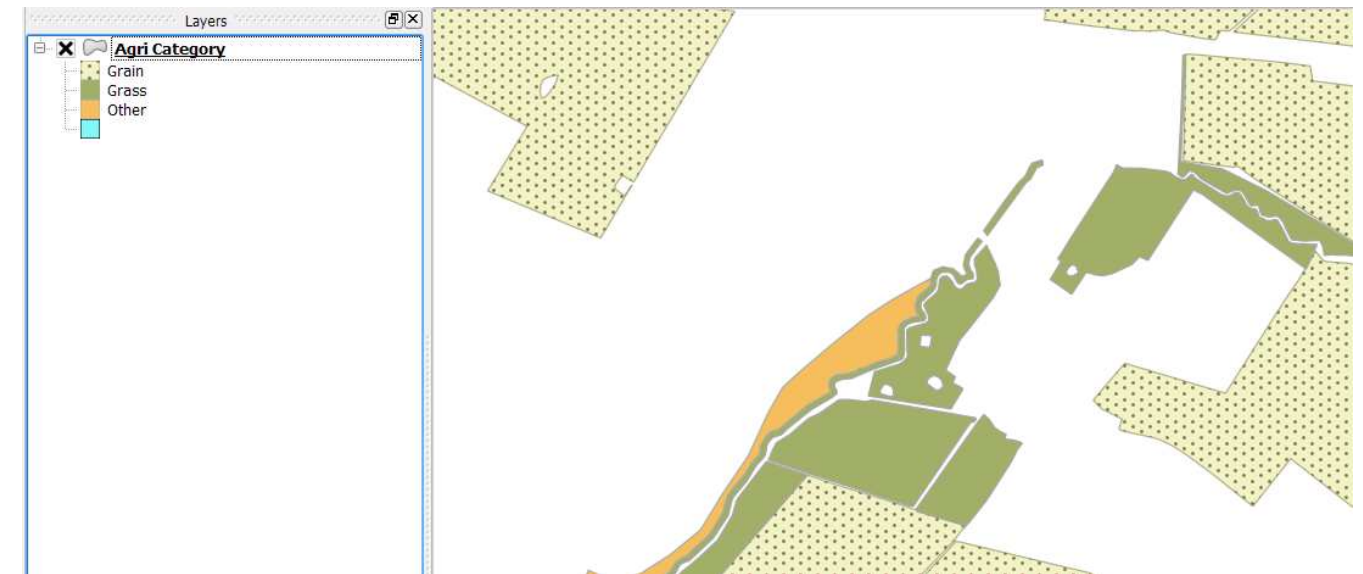


You can change the color for each symbol by double clicking at the color. Change the 'grain' to **dotted**.

Click on **OK**



Now your map has different colors and in the **Layer** a legend is displayed.  
Right Click on the layer name>Enable **Show feature count**



Save this work as a project  
Click on **Project>Save**

## Duplicate layer

You are going to see the same layer, but categorized from another field. Make two duplicates

Right click at the layer>Click on **Duplicate**

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In the **Layer** window 3 layers are shown.

Right click at the first layer> Click on **Rename**

Write **Agri Category**

Right click at the second layer layer> Click on **Rename**

Write **Agri Crop Grass**

Right click at the third layer layer> Click on **Rename**

Write **Agri Area Ha**

## Filter, categorize, classify and colorize - again

Right click on the layer **Agri Cropp Grass**

Click on **Filter**

The Filter is only visible if the layer is in non-edit mode

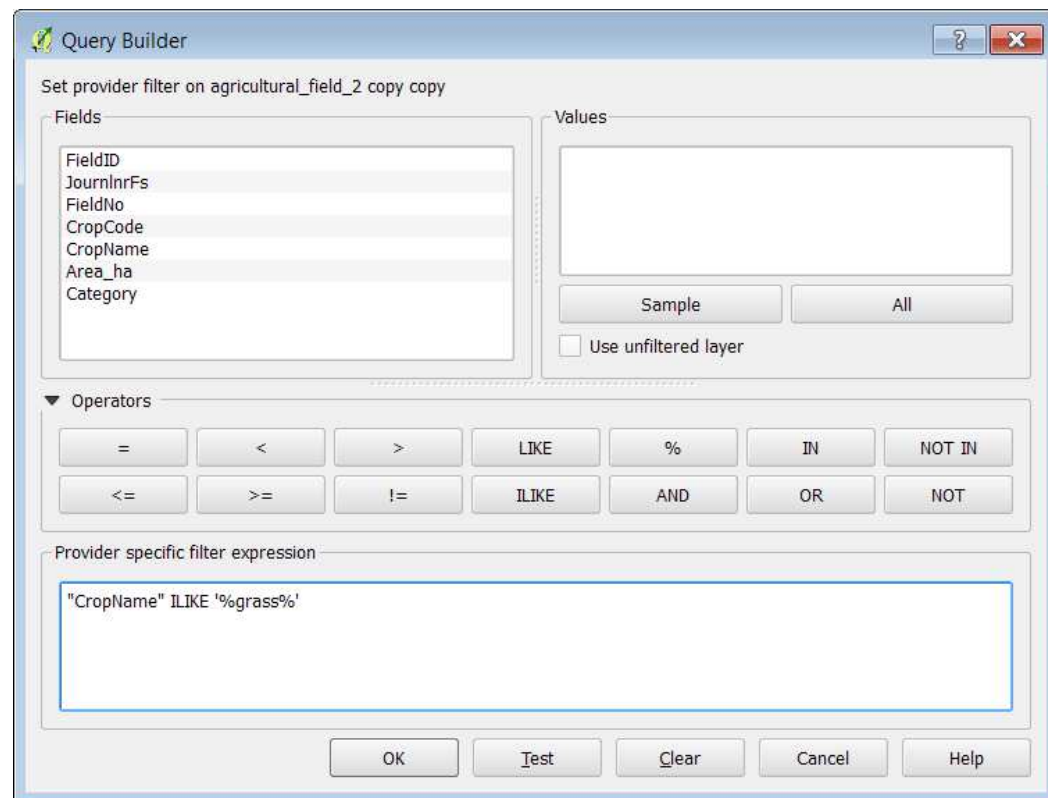
In this part of the lesson you are going to make a filter, where only records containing Grass will be shown.

Double click on **CropName** click on **ILIKE**

Write **'%grass%'**

Click **OK**

See in the map how all the other crop-types are removed.



Now categorize all grass – use a color ramp with Greens

Double click on the layer **Agri Crop Grass**

Click on the Tab **Style**

Click on **Single Symbol** and choose **Categorized**

In Column choose **CropName**

In **Color ramp** choose Greens

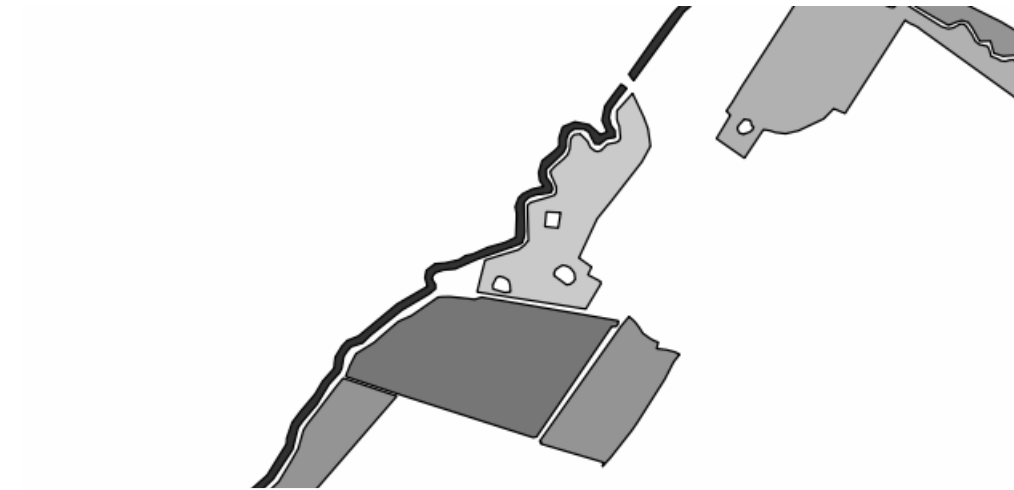
Click on **Classify**

Click on **OK**

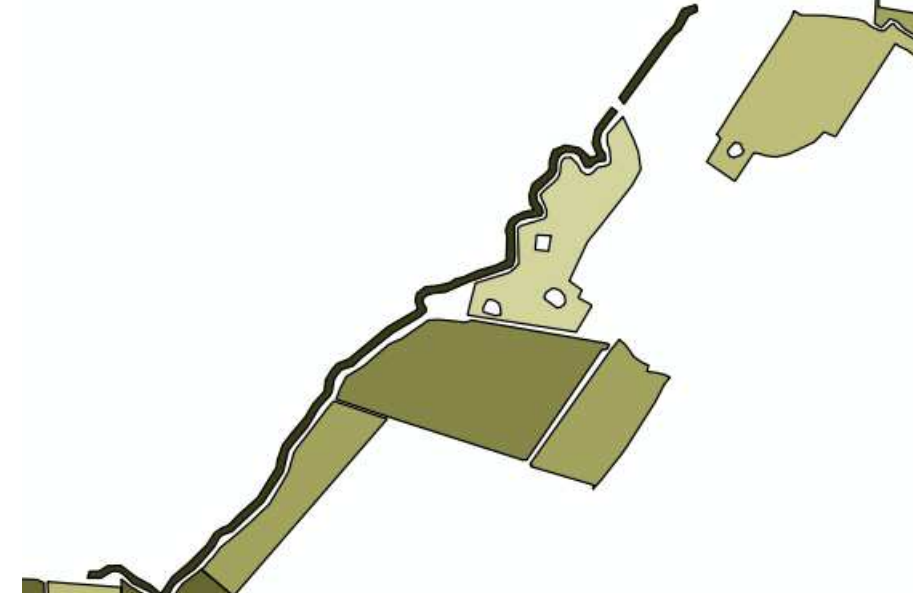
## Preview

When a map is colorized, it is important to see how it would look like both in a print and a photocopy in gray-scale. Another issue is colorblindness.

Click on **View>Preview Mode>Photocopy**



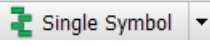
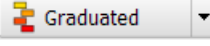
Click on **View>Preview Mode>Simulate color blindness (protanope)**



## Graduate, classify and colorize

In the last layer **Agri Area Ha** you are going to colorize by the area value.

Double click on **Agri Area Ha**

Click on  and choose 

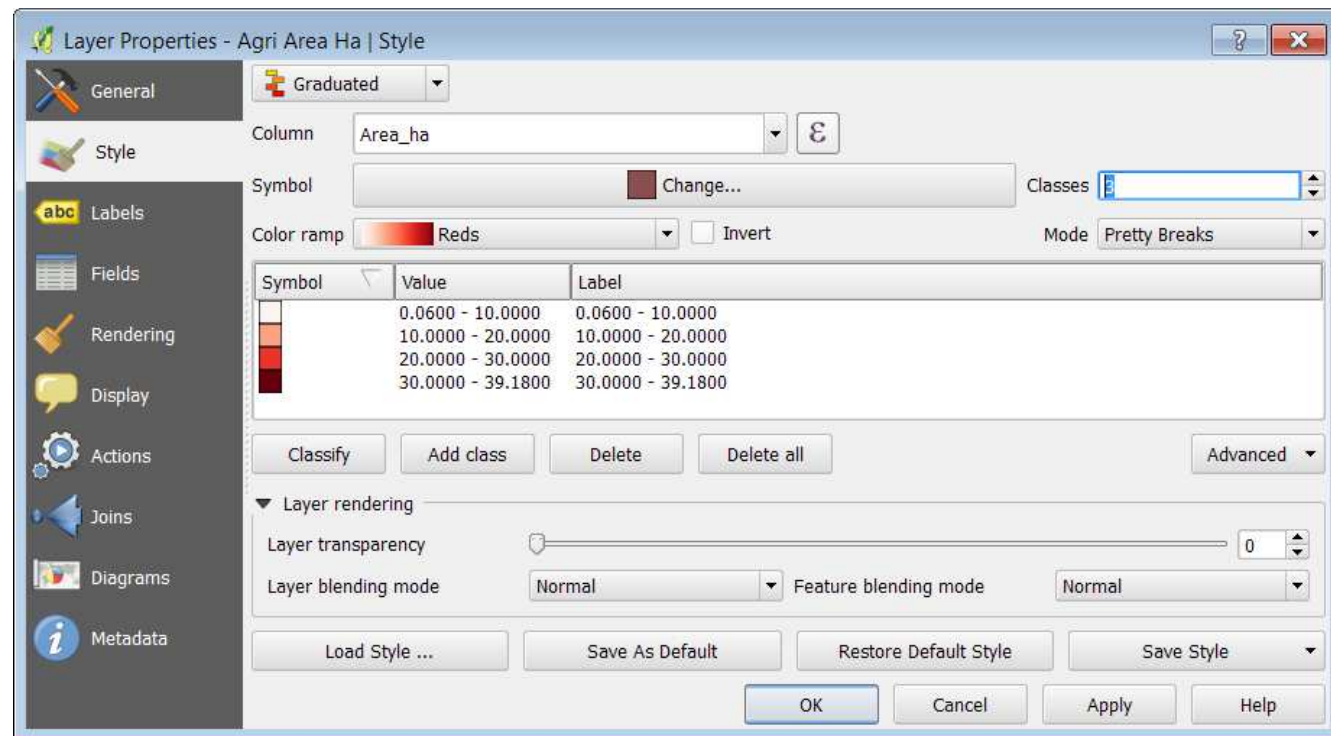
The values and labels have 4 decimals. In this example the values go from 0.06 to 39.180.

Equal intervals that are a default setting in QGIS are hard to follow. We will change that.

In **Mode** choose **Pretty Breaks**

Try to change **Classes**

It would make more sense to change the labels to a whole number 0-10, 10-20 ect. Edit by simply double clicking on the number and deleting appropriate number of zeros.



Click on **OK**

Save the project!