QGIS Application - Bug report #5710
fTools Random points cannot create 0 points within a polygon

2012-06-01 10:53 AM - Kenton Ngo

Status:	Closed		
Priority:	Normal		
Assignee:			
Category:	Processing/QGIS		
Affected QGIS version:	master	**Regression?:**	
Operating System:	Mac OS X	**Easy fix?:**	
Pull Request or Patch supplied:	No	**Resolution:**	worksforme
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	15234

Description

When using fTools Random Points to generate a specified number of points per polygon using an input field, it crashes if I direct it to assign 0 points to any polygon.

I have to reformat my data to create at least one dot per polygon and then manually remove the extra points later if they are supposed to accurately show 0.

For example, if I want to run a dot density map that has one dot per 25 people, and one of the polygons is a lake that has 0 people in it, I still have to assign 1 dot to it or else it will crash. This would be inaccurate, so I have to manually remove it later.

Appears to be a common issue, see http://gis.stackexchange.com/questions/16830/dot-density-maps-in-qgis

Error text below:

An error has occured while executing Python code:

Traceback (most recent call last):
  File "/Users/kentonngo/.qgis/python/plugins/fTools/tools/doRandPoints.py", line 121, in accept
    self.randomize(inLayer, outPath, minimum, design, value)
  File "/Users/kentonngo/.qgis/python/plugins/fTools/tools/doRandPoints.py", line 211, in randomize
    else: points = self.loopThruPolygons(inLayer, value, design)
  File "/Users/kentonngo/.qgis/python/plugins/fTools/tools/doRandPoints.py", line 258, in loopThruPolygons
    sPoints.extend(self.simpleRandom(value, sGeom, sExt.xMinimum(), sExt.xMaximum(), sExt.yMinimum(), sExt.yMaximum()))
  File "/Users/kentonngo/.qgis/python/plugins/fTools/tools/doRandPoints.py", line 166, in simpleRandom
    add = (70.00 - 40.00) / n
ZeroDivisionError: float division

Python version:
2.6.1 (r261:67515, Jun 24 2010, 21:47:49)
[GCC 4.2.1 (Apple Inc. build 5646)]

QGIS version:
1.9.90-Alpha Alpha, e13e45f

Python path: ['/Users/kentonngo/.qgis/python/plugins/sextante', '/Applications/QGIS-1.9.app/Contents/MacOS/../Resources/python', '/Users/kentonngo/.qgis/python', '/Users/kentonngo/.qgis/python/plugins', '/Applications/QGIS-1.9.app/Contents/MacOS/../Resources/python/plugins', '/Library/Frameworks/SQLite3.framework/Versions/3/Python/2.6', '/Library/Frameworks/GDAL.framework/Versions/1.9/Python/2.6/site-packages', '/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python26.zip',

'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6',
'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/plat-darwin',
'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/plat-mac',
'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/plat-mac/lib-scriptpackages',
'/System/Library/Frameworks/Python.framework/Versions/2.6/Extras/lib/python',
'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/lib-tk',
'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/lib-old',
'/System/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/lib-dynload', '/Library/Python/2.6/site-packages',
'/System/Library/Frameworks/Python.framework/Versions/2.6/Extras/lib/python/PyObjC',
'/System/Library/Frameworks/Python.framework/Versions/2.6/Extras/lib/python/wx-2.8-mac-unicode',
'/Users/kentonngo/.qgis/python/plugins/fTools/tools', '/Users/kentonngo/.qgis/python/plugins/mmqgis/forms', '/Users/kentonngo/Desktop']

History

#1 - 2012-09-04 12:09 PM - Paolo Cavallini

- Target version set to Version 2.0.0

#2 - 2013-04-12 09:00 PM - maning sambale

- File Screen_Shot_2013-04-13_at_11.57.49_AM.png added

I cannot reproduce this issue. See attached screenshot.

The input polygon is a hex grid with attribute value range of 0-8 (0 is colored as red). Using the Vector > Research Tools > Random points, and using the Use value input field to set the number of points on each polygon, the process is completed and the resulting point layer looks OK. No point data is created if the polygon attribute value is 0.

System: Ubuntu precise latest nightly build.

Proposed for closing this bug.

#3 - 2013-07-12 10:49 AM - Paolo Cavallini

- Category set to 44

#4 - 2013-07-13 03:39 AM - Giovanni Manghi

- Resolution set to worksforme
- Status changed from Open to Closed

Works fine in master, reopen if necessary.

#5 - 2017-05-01 01:22 AM - Giovanni Manghi

The "ftools" category is being removed from the tracker, changing the category of this ticket to "Processing/QGIS" to not leave the category orphaned.

Files

Screen_Shot_2013-04-13_at_11.57.49_AM.png	661 KB	2013-04-12	maning sambale