

From: [Gregory, Chris](#)
To: [Turner, Ed](#)
Cc: [Guinotte, John](#)
Subject: Re: Kernel Questions
Date: Thursday, February 23, 2017 7:06:03 PM

Thanks Ed and John.

Got caught in all-day meetings & just learned I have to blow off Friday for surgery, so I'll be back at this on Monday.

For context: years ago there were ESRI and 3rd-party products that could take a point file and output a polygon shapefile with an adaptive kernel density based on simple inputs (what/where are the points, what output do you want [e.g., 50%, 95%]). Producing many of these shapefiles could be accomplished easily by scripting and/or batching.

Now that I'm getting back into the home range/kernel world, it seems this easy task has disappeared for ArcMap 10.x and been replaced with somewhat similar tools, raster outputs, etc. Given that I will need to produce a large amount of these kernel home ranges weekly for our field crews (to help them to set eyes on telemetered birds), I'm looking for simple solutions. Third-party is fine, as our IT/GIS folks know about this need.

You both may have provided me already with modern-day, simple solutions (I'll find out on Monday). But if my context causes you to think of something else that may be faster/easier, just let me know. Thanks again,

Chris

On Thu, Feb 23, 2017 at 11:11 AM, Turner, Ed <ed_turner@fws.gov> wrote:
Thanks for the help John.

I just dug this up and will take a look.

<https://www.youtube.com/watch?v=E43UfVxj-W0>

<http://support.esri.com/technical-article/000012211>

I have ET Geo Wizard on my computer too that will do MC Polys, but I think Chris will have better luck with the kernels and heat runs for looking at home ranges and animal movements.

Thanks for looking for the web site on your end.

Ed

On Thu, Feb 23, 2017 at 11:08 AM, Guinotte, John <john_guinotte@fws.gov> wrote:

Hi Ed,

You have to have spatial analyst installed in Arc. Then run "kernel density". The settings is where it gets tricky and you can really impact the results by altering the input search radius and cell size. I found a really good website that shows this, but I can't seem to find it right now. I'll keep looking and pass it along.

Best, John

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On Thu, Feb 23, 2017 at 11:57 AM, Turner, Ed <ed_turner@fws.gov> wrote:

Hi John, I have a question about the kernels. I have not really worked with those in years following the old Hawth's tools use, except for the ones I attempted the other day on the wolverine and received funky results.

How did you run the heat maps and kernels the other day?

Did you run them in AM, using the Spatial Analyst Tools, Density functions?

I know there are all kinds of settings.

I ask, because we have one of our biologist staff at the Palm Springs office, Chris Gregory who needs to start running a series of analysis.

Any input you would, could be a help possibly.

I included Chris in the email just in case you have some advice.

Thanks, Ed

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