From: Juliusson, Lara
To: Jason Tack
Cc: Doherty, Kevin; Woodbridge, Brian; Todd Lickfett; Brad Fedy
Subject: Re: Homework assignment
Date: Tuesday, May 13, 2014 1:22:53 PM

Interesting. I've got a couple of meetings coming up, but I'll weigh in before the end of the day with my thoughts on moving window radii distances.

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On Tue, May 13, 2014 at 1:15 PM, Jason Tack <jasontack@gmail.com> wrote:

> Sorry for the confusion the buffers are 30-990m moving windows (circular). So, a 30m buffer would encompass 5 - 30m pixels (150m^2); 60m moving window would encompass 13 pixels (390m^2); 90m would encompass 25 cells (750m^2); etc. etc.
>
> -Elmer Keith on criticism of using a .475 for mule deer- "are you worried you're gonna kill it too dead?"
>
> On Tue, May 13, 2014 at 12:59 PM, Doherty, Kevin <kevin_doherty@fws.gov> wrote:
>
> > Tack,
> >
> > To make sure I am understanding this, you used a 90 to 120 meter buffer? Which would equate to a cell size of 210m^2 (90 + 90 + 30) meters or 270m^2 (120 + 120 + 30) meters as a minimum mapping unit. Then within each cell (either 210 or 270 m^2) we would have the mean number of cliff cells so it would equate to a moving window. If we asked Jack O'conner which was his beloved I am pretty sure he would go with .270, o-wait I digress we are not talking about calibers!
> >
> > Cheers
> > Kevin
> >
> > On Tue, May 13, 2014 at 12:47 PM, Jason Tack <jasontack@gmail.com> wrote:
> >
> > > Hi all,
> > >
> > > I did a quick look into model sensitivity across scales using our most predictive variable for the wyoming basin.
> > >
> > > Basically I:
> > >
> > > 1) ran moving windows from 30-990m at 30 increments across the Wyoming Basin (32 rasters took ~ 5 hours of processing time on crappy laptop).

2) Ran use-available models using each cliff variable univariately

3) and summarized coefficient estimate and model likelihood (attached figure in document).

The take home message is that for cliffs, 90-120m windows are ideal, and going out to 1km reduces explanatory power by ~15%. Also cliffs summarized near 1km is only moderately correlated (r=.6) with the most predictive scale.

Cheers,
tack

--

Kevin Doherty, PhD

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