

GISette



A quarterly newsletter to broaden people's understanding of mapping, geography and the City's Geographic Information System

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Marlborough's Public Information Mapping Application (PIMA):

<http://gis.marlborough-ma.gov>

Season's Greetings from the *GISette*! Another lovely fall has passed us by and winter is now here. It's my great pleasure to present you with our latest newsletter. I've been spending a lot of my time lately editing existing data and adding a seemingly endless number of updates to most of our utility layers. Our GIS mapping website continues to be a hit with developers, engineers and realtors alike. However, recently we have suffered some very frustrating outages and downtimes on the site. I know this has been hard for some people. It has made me realize that we need to start to change the way I think about how and where we host our website. Stay tuned for more on that.

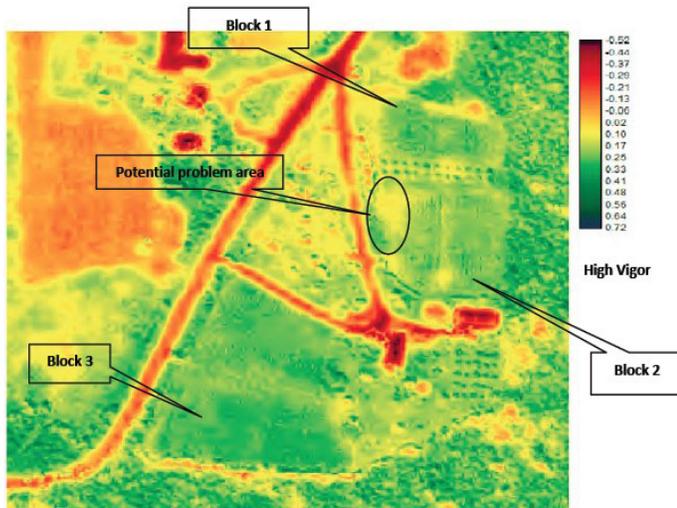
In Vino Veritas

In wine is truth.

A restaurant wine list can be one of the most daunting and challenging reads you will ever come across. I don't mean the back page of the menu with six selections, all of which by the glass. Those are fairly user friendly. I'm talking about ten leather bound pages, single spaced with names and words most people cannot even pronounce, let alone understand to make a selection from. We won't even discuss pricing. People fear this list. It almost inevitably ends in the words "Hmmm, well, what would you recommend?"

It's kind of sad really. Personally, I get very excited to look at lists like these. Granted, I'm kind of into wine and know a little about it. But, the reality is that you are looking at a near perfect lesson in geography. Remember, geography is the study of the land, its atmosphere and its peoples. Wine *IS* geography in a bottle. Wine comes from all around the world and then from even more specific sub-regions. The same type of grape grown in two different places will taste totally different. Why? Because the soils, the people making the wine and the weather in two different places are never the same. Wine actually tastes like the place it comes from. It's hard to conceptualize that at first, but it really makes perfect sense. Think about it. The roots of the vine draw water and nutrients from the soil. Well, are those soils volcanic in origin or are they from years of runoff from mountains and streams? Different soils impart different flavors into the vines and then the grapes. The weather during the growing season is

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Map showing infrared analysis of plant health in a vineyard. Green color shows us healthy, less stressed vines.

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extremely important and also varies from place to place. Different grapes like different amounts of sun and temperature to ripen. Pinot Noir, for example, likes cooler climates with more moisture. Conversely, cabernet sauvignon likes more heat and lots of sun. Different kinds of weather in different places. How much sun the vines get effects the amount of sugar in the grapes. The more sugar in the grapes affects the amount of alcohol produced. The amount of alcohol produced effects the taste of the wine. That's the "heat" you feel when you take a sip. All connected to the weather which is connected to the climate which is connected to the location. Then you add the winemaker. The winemaker is the perfect combination of farmer and artist. No two are alike. There it is: earth, atmosphere and people. Geography in a glass!

Because winemaking is in fact farming, new technologies in farming are also finding their way into grape growing. Winemakers are starting to use GIS more frequently. We all know by now that GIS gets its real power by layering different types of information on top of one another. This allows us to see trends and patterns that don't necessarily present themselves in any other way. Farming has been a tremendous beneficiary of GIS. Most of the important things we need to know for the successful planting of crops are easily mapped. Data that corresponds to locations such as rainfall, temperature, crop types, are all easily put into a GIS. What they are able to see through GIS is changing how they plant vines and even more importantly, *where* they plant them. This can translate into huge money for grape growers. It can be the difference between a few hundred dollars for a ton of grapes versus over ten thousand dollars a ton. All for the same kind of grape, but planted in a different location. On the actual winemaking side, the quality of the grapes translates into higher quality wine and better reviews which means higher demand and more profit. Knowing where to plant and how to maintain the vines is everything in wine.

Using GIS mapping helps growers select specific geographic locations that will optimize growing conditions and impart the flavors they are looking to get out of a grape. Growers now have the tools that allow them to find the perfect site. By mapping things like temperature, soil type, minimum and maximum sun exposure, moisture retention in varying soil types and wind patterns, wine growers are able to make better informed and financially responsible decisions.

Next time you face that dreaded leather bound list, take a second to think about everything that went into that glass of wine. You are tasting geography! For a few minutes you can feel the hot, dry summer of France's Rhone Valley or feel the cool foggy morning air north of San Francisco. It's one of the most interesting and least expensive trips you will ever take! Cheers!

How To:

PRINT CUSTOM MAPS TO SCALE

1. Open the site and navigate to the area of interest.
2. Once you have your desired map, click on the "Export Map" icon  at the top of the page.
3. After clicking, a new window will appear that lets you set up your map to be printed.
4. Change the title to whatever you want to call your print.
5. Select the size and layout of the map.
6. Choose the format of the print (PDF, jpeg or png).
7. DPI can be changed from the default if a higher resolution is needed.
8. Print to Scale is a new feature. It allows you to print your map at a pre-set scale to make measurement easy. Check the box, and then enter the number in the box that corresponds to the number of feet you want 1 inch to equal. For 1 inch equals 100 feet, simply check the box and enter 100.
9. Export your map. You can then print or save it.



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