Agricultural Experiment Station • Cooperative Extension Service

Graphics Fundamentals II

by Ana Henke, Publications Supervisor

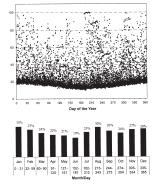
Understanding the difference between a vector and a raster image

Raster images are composed of pixels and are dependant on resolution for clarity (photos, line art, etc.). These are the most common raster image formats: .tif, .jpg, .gif, .png, .bmp. You can use all of these formats in MS PowerPoint and Word, but we recommend that you use .tif formats for print projects.

When submitting photos with your manuscripts, please submit each photo as a separate file. If you've taken photos with your digital camera, send us your .jpg files and we'll convert them to .tif files for printing.

Vector images are not dependent on resolution for clarity and can be enlarged without distortion. Vector images are generally developed with Adobe Illustrator and the formats are .eps or .ai. They work like an electronic "connect-the-dots" image and are based on a mathematical grid.







The above are examples of raster images, which are dependent on resolution for clarity. Remember, the higher the resolution, the better the quality of the printed image.





This is a vector image with anchor points (left). This example shows you how you can modify a vector file by extending some of the anchor points (right). Most logos are designed as vector images and can be enlarged without distortion. This is how you can see logos on the sides of airplanes!