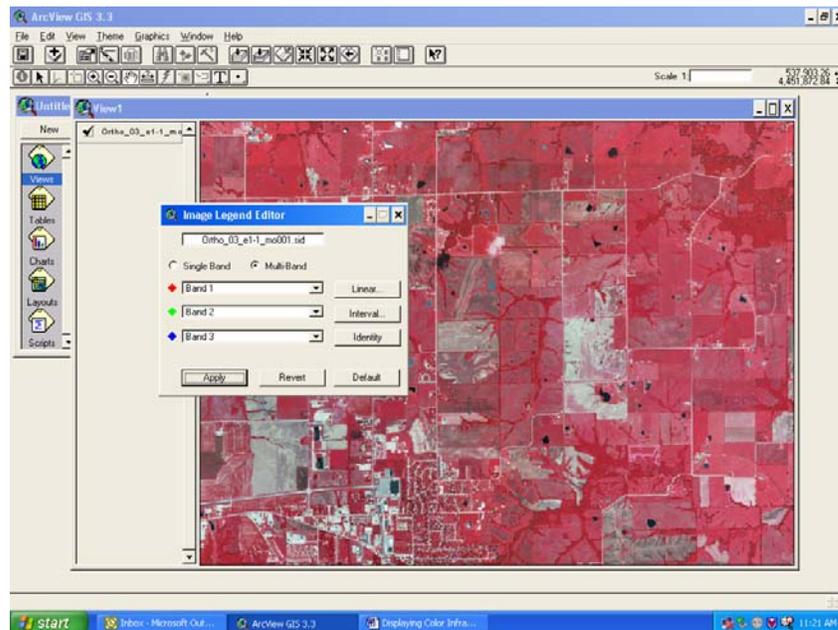


## Displaying Color Infrared Orthoimagery in Black and White or “Natural” Color

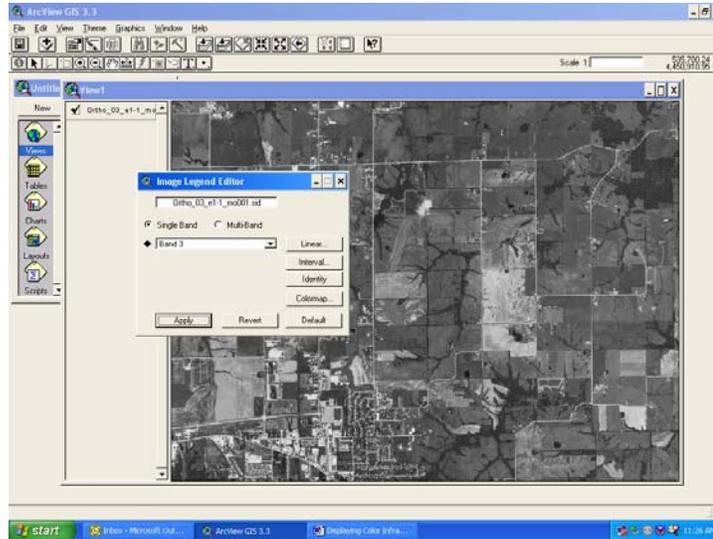
The most current orthoimagery delivered to field offices is 3-band color imagery in a “false color” infrared color scheme. In color infrared imagery, green vegetation appears in shades of red. Subtle differences in vegetation species, health and canopy closure are more evident in color infrared compared to black and white or natural color. Information about land condition such as overgrazing, weed infestation, irrigation failure, tree die-off and much more can best be detected from color infrared imagery.

However, there are times when it might be useful to turn the color infrared imagery to black and white or natural color. For example, when printing to a black and white printer or providing a hard copy map to a producer who is unfamiliar with the appearance of color infrared imagery one might wish to change the imagery. The following illustrates the steps for accomplishing these changes using ArcView:

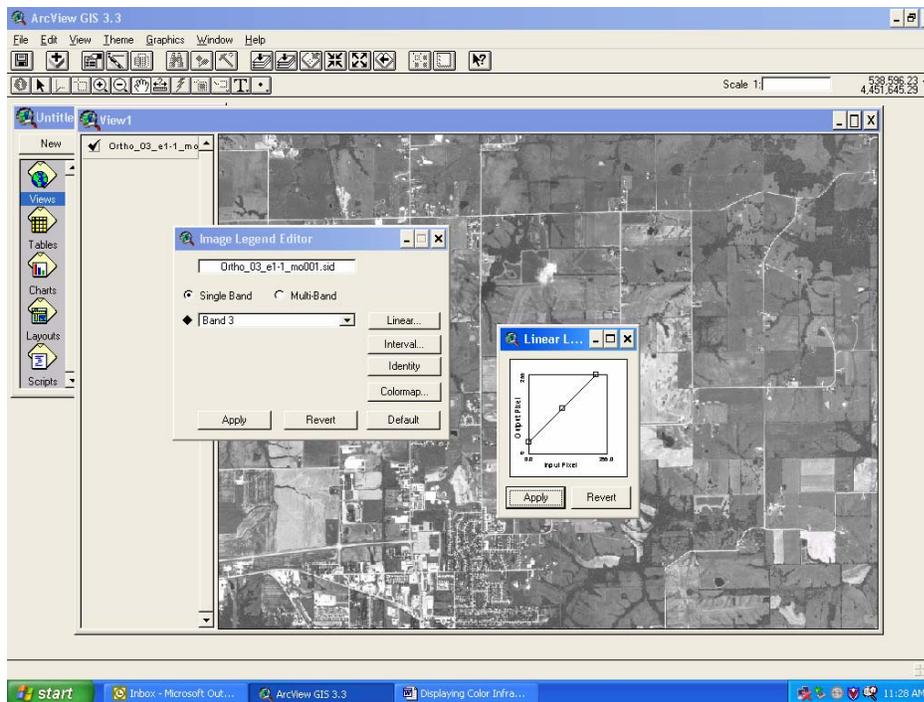
1. Load the color infrared imagery into a View in ArcView. The naming convention for the imagery is *ortho\_03\_e1-1\_mo<countyfipscode>.sid*. Double-click in the gray box surrounding the image name in the View’s Table of Contents to bring up the Image Legend Editor window (this is the same as bringing up the Legend Editor for a vector theme such as common land unit, but in this case ArcView recognizes it is a raster image theme and brings up the Image Legend Editor).



2. To display the image in **Black&White**, select the “single band” option and change the Band to Band 3. Click Apply.



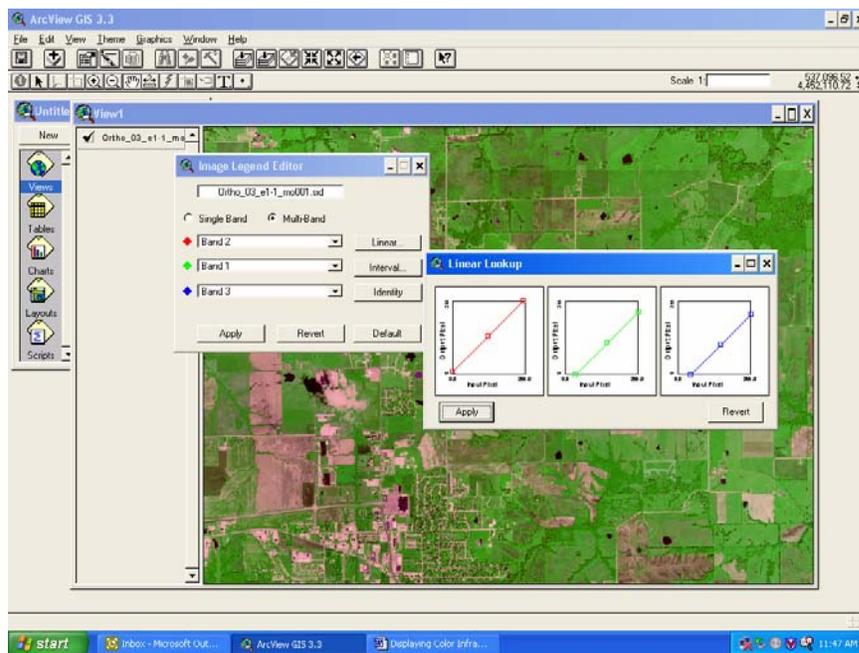
3. You may notice that the image is now too dark (this will vary by image). Click the “Linear” button on the image legend editor window, bringing up the linear look-up coordinate plane. Click and drag the line “up” (higher output values) to lighten the image and click apply. You may fine-tune your adjustments by clicking and dragging the line up or down and applying the change until the photo has the appearance you like.



4. At any point during these modifications, you may click the “Default” button in the Image Legend Editor window to return to the image’s original appearance. If you

have “Single Band” selected, this will default to the original appearance of the selected band; if you have “Multi-band” selected, with a band order of red=band 1, green=band 2 and blue=band 3, the original “false color” infrared color scheme will return. (NOTE: The color gun is denoted in the Image Legend Editor window using a diamond symbol of that color).

5. To turn the image to a “**natural**” color appearance, where green vegetation is green, etc, you need to change the color gun band assignments in the Image Legend Editor. With Multi-Band selected, change the band assignments to red=Band 2, green = Band 1 and blue = Band 3 and Apply. Again, the image may need some adjustments. This time, when the “Linear” button is selected, you get 3 coordinate plane look-ups, one for each color gun. Adjust the green gun “down” and the blue gun “down” and apply. Continue to adjust until you like the outcome.



6. The color adjustments described above are “virtual”; the actual image has not been changed. If you save an ArcView project with an altered color scheme the image will be displayed in that manner when you reopen the project. However, if you add the same image to another project, it will appear in the original color infrared scheme.