

THE BIRREN SYSTEM FOR OUTDOOR COLOR

The Birren color theory is an approach to color theory based on the ideas, writings and influence of Faber Birren, who lived from 1900 to 1988. Birren was the author of numerous articles and books on color theory

The Birren system for outdoor color uses six basic colors which are listed here in a descending order of the amount of light reflected from each (a value scale):

White	80%
Yellow	55%
Green	35%
Red	25%
Blue	20%
Black	0%

Masses of high value color are not too effective in the full sunlight, as they tend to produce glare. For those borders located in strong sunlight, lower values should predominate. In shady borders, colors of high value can be used more freely. In deep shade, colors that possess a high degree of luminosity (orange and scarlet) are more satisfactory than yellow or white -- although both yellow and white have higher color values.

Flower colors are seldom pure. Usually they are tints, shades or tones of the pure color or hue.

Tints are derived from yellow, green, red, or blue by the addition of white.

Shades of these colors are obtained by the addition of black.

Tones result from the addition of gray.

In each case (tint, shade or tone), as a measure of white, black or gray is added to a pure color -- that color decreases in strength, or purity. This decrease is said to be a decrease in Chroma (the perceived intensity of a specific color).

Although light, climate and humidity play an important part in the way colors can be arranged in the landscape, it is still possible to use either complementary or analogous colors (those which adjoin one another in the color circle) for harmonious results.

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Suggested Combinations

Blue

1. With scarlet and buff.
2. With white and yellow.
3. With orange and scarlet.
4. With various Chromas of blue.
5. With yellow or orange of the same Chroma (but use sparingly).

Violet, Purple and Magenta

(These colors lie between red and blue)

1. Those hues nearer blue - group together or use with tints and shades of blue.
2. Those hues nearer red - group together or use with tints or shades of red.
3. Violet or purple should be used with plenty of yellow or yellow-green foliage.
4. Violet and purple can be contrasted with whites and yellows of equal Chroma.

Red and Scarlet

1. With dense green backgrounds.
2. For sharp contrast, with white or clear blue.
3. With analogous hues, red-violet and red-orange.

Pink (Tint or Red)

1. Will gain more strength if interspersed with white.
2. Goes well with other colors of the same Chroma.

Orange

1. With darker colors - red, browns and bronzes.
2. With turquoise blue (complement).
3. With purple flowers and bright green foliage (split complement).
4. With creamy white or yellow.

Yellow

1. With blue of equal Chroma.
2. With white (but use sparingly).
3. Small amounts will liven up cold, heavy compositions.

White

1. Frequently turns out to be a tint of one color or another. If so, use with other Chromas of same color, or as a contrast with that color's complement.
2. If interspersed among low value colors, it softens them.
3. If interspersed among high value colors, it strengthens them.

Greens

There are a great many foliage greens varying from deep, dull green through light gray-green, blue and yellow-green to the darkest of the evergreens. Foliage color must be secondary to flower colors and be carefully chosen to intensify the effect of anything placed in front of it. Thus, yellow-green or blue-green foliage can spoil the effect of a carefully arranged harmony that will not be at its best if yellow or blue is included.

Gray and Silvery Foliage

They can be used to lighten heavy or monotonous masses of dark green and, at the same time, heighten the effect of distance. They can also bring conflicting colors into pleasing relationships. Gray and silvery foliage is ineffective when dotted among bright colors, but very effective in similar surroundings if used in mass. They are most effective with light-tinted flowers