

Wildflowers for Reclamation¹

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Abstract. A 1-acre demonstration seeding using a standard wildflower mix was established at the Peabody Coal Company, Colony Bay Mine at Wharton, West Virginia, in April 1989. Soil samples showed a pH range of 5.9 to 7.1. The site was prepared by tracking-in with a D-9 cat. Seeding was by hydroseeder with 400 pounds of 18-46-0 fertilizer, 600 pounds mulch, and 6 pounds of wildflower seed. By weight, 72.6 percent of the seed mix contained baby's breath (Gypsophila elegans), bachelor's button (Centaurea cyanus), calendula (Calendula officinalis), Chinese forget-me-not (Myosotis sylvatica), candytuft (Iberis umbellata), sweet William (Dianthus barbatus), blue flax (Linum lewisii), and wallflower (Cheiranthus allionii). The remaining 27.4 percent included a mix of 21 other species. After 4 weeks, germination was evident over the entire plot. At 8 weeks, baby's breath was conspicuous throughout, with lesser amounts of dames rocket (Hesperis matronalis), corn poppy (Papaver rhoeas), California poppy (Eschscholzia californica), candytuft, scarlet flax (Linum grandiflorum rubrum), bachelor's button, and toadflax (Linaria maroccana). Cover was estimated at 60 percent. An evaluation on September 14 showed all the above present plus cosmos (Cosmos bipinnatus), garland chrysanthemum (Chrysanthemum coronarium), wallflower, lance leaf coreopsis (Coreopsis lanceolata), plains coreopsis (Coreopsis tinctoria), black-eyed Susan (Rudbeckia hirta), calendula, blanket-flower (Gaillardia aristata), and rose mallow (Lavatera trimestris). Total cover was estimated at 70 percent. However, the development of the stand was weak. The flowers were not as large or robust as they should have been. Possibly topsoil or additional organic material would have enhanced development of the wildflowers.

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