Seeding Missouri Natives on a Green Rooftop at Shaw Nature Reserve



Polanisia (lt. pink) and Talinum (magenta) in bloom. Rooftop was kept watered during the summer drought.









In spring of 2012 Shaw Nature Reserve built a green rooftop on top of its new bathroom near the picnic pavilions. First, the building was engineered to support the extra weight! You can't just put a green roof on top of any building. The next step involved rolling out a protective layer of rubber liner. Then inter-locking rigid plastic trays were spread out over the entire area followed by a sixinch layer of soil that was hoisted onto the roof with a crane (see photo). The soil is a lightweight mixture of heat-expanded rock, compost and sand. In early May seed was hand sown (see photo). Seed had been kept cool and moist in a refrigerator for over two months to break seed dormancy. Germination occurred within one week followed by a light fertilizing three weeks later. The seed mix consisted of the following species:

Achillea millefolium Agalinis tenuifolia* Allium cernuum A. stellatum* Amorpha canescens Aster oolentangiense Bouteloua curtipendula** Calamintha arkansana Chamaecrista fasciculata** Chrysopsis villosa3 Coreopsis lanceolata Dalea purpurea* Echinacea simulata* Gentiana andrewsii Helenium amarum* Heuchera richardsonii Koeleria macrantha Liatris punctata Manfreda virginica* Palafoxia callosa* Polanisia dodecandra** Pycnanthemum tenuifolia* Ratibida columnifera* R. pinnata Rudbeckia hirta* R. missouriensis Solidago missouriensis S. nemoralis Sporobolus compositus S. heterolepis Talinum calycinum** Tridens strictus Zizia aurea

^{*} species that germinated by August ** species that bloomed in the first year