

# Native Lupine Seedbed Establishment for Federally Listed Karner Blue Butterfly Habitat

## 2007 Accomplishments

Lupine is a required plant for survival of the federally Threatened Karner Blue Butterfly (KBB). The Forest plans to restore approximately 4,000 acres of KBB habitat in the next ten years. This project began establishing 5 acres of Michigan native genotype lupine in permanent beds to serve as a seed source for future restoration projects.

In FY2006, a deer exclosure fence was installed around one of the seed beds. Initial control of invasive plants using mechanical and chemical treatments was done in the fall. In spring of 2007, residual lupine plants from an earlier planting of native forbs emerged after the fall glyphosate application. Three more glyphosate applications were made in 07 continuing invasive removal. Application occurred once the lupine seed dispersal was completed. Residual lupine stems were cut at ground level to avoid herbicide contact and maintain residual lupine. Adjacent fallow seedbeds infested with knapweed (45 acres) were also treated with glyphosate to reduce invasive infestation. Those beds will be treated again in 08 and planted to native warm season grasses. September 18<sup>th</sup> lupine was planted along with companion little bluestem that will serve to minimize invasive plant re-establishment. Two beds are planted to compare methods: one fenced, one unfenced with varied ratios of little bluestem to lupine.



*Hand seeding Lupine in residual native wildflower/grasses bed, September 18, 2007.*



*Seeding little bluestem and harrowing seed into bed.*

Year Awarded: 2006

Project completion: 2007

Report number: 2 of 2

Expenditures:

- Total funding \$28,800 – FY06, expended \$28,800;
- \$0 remaining

Contractors: Straight Fence,  
Michigan Wildflower Farm  
Partner: Michigan Garden Clubs

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