



New York State Department of Environmental Conservation  
Division of Fish and Wildlife  
Endangered Species Unit



**GENERAL RECOMMENDATIONS FOR PROPERTIES  
SUPPORTING KARNER BLUE BUTTERFLIES**

Most remaining Karner blue butterfly (*Lycaeides melissa samuelis*) populations in New York State are small remnants, extremely vulnerable to alteration and extirpation. Unfortunately for this species, many of the remaining areas which support Karner blues are on properties which are targeted for or vulnerable to development. Under state law (S11-0535), it is unlawful to take or destroy this listed endangered species, including any of its life stages (e.g. eggs, larvae, pupae, or adults). Removal of this species' essential habitat constitutes a taking. The following are general recommendations for protection and management of Karner blue sites:

- Since Karner blues and their host plant, wild blue lupine (*Lupinus perennis*), generally occupy a very small physical area (usually only a fraction of a given property), we recommend that this area be set aside for butterfly conservation. This "essential habitat" or "conservation" area should consist of all the elements required by the Karner blue to procreate and survive.
- This conservation area should remain undisturbed by construction activities, storage of materials or equipment, landscaping activities, alteration of the water table and runoff, etc.
- Application of fertilizer, pesticides or herbicides, artificial watering, and snow deposition are other activities which should be avoided in the conservation area, or in nearby areas where they might impact the conservation area through wind drift or runoff.
- Within cleared (especially "common") areas adjacent to or near the conservation area, reseeded with a recommended mix of wildflower food plants for Karner blues is highly desirable. A recommended list of such plants is attached.
- Any construction near the conservation area should be timed to avoid the flight periods of the Karner blue (approximately mid-May to late August).

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- Encroachment of woody vegetation is detrimental to growth of the blue lupine. Therefore, annual or biannual mowing of the conservation area is desirable. Mowing should take place after September 1 and before April 1, with the mowing blade set at six inches or higher to avoid harming Karner blue eggs which may be on plant stems. This mowing could be accomplished as part of regular landscaping activities by the landowner, or by another designated party.
- DEC staff or a designated party would need access to the site for monitoring, research, and management. Management activities may include collection of lupine seeds, planting of lupine and/or other wildflowers, and control of woody or invasive plant species.
- Generally, it is desirable to somehow mark (e.g. flag-off, post, etc.) the conservation area to clearly demark its boundaries and to avoid encroachment.
- Protection and management activities may vary, depending on site characteristics and other factors. An individual site management plan is most desirable. Management goals and guidelines should be included in the deeds of affected lots to ensure management and perpetuation of the conservation area and its Karner blue population.
- The Karner blue was given Federal endangered species status and protection on December 14, 1992. This may or may not affect activities at a given site. For more information on this or on any other aspect of Karner blues in New York, contact Unit Leader, Endangered Species Unit, Wildlife Resources Center, Delmar, New York 12054-9767.