"Take" is defined by the ESA as 'to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any endangered species. Purposeful take is when the reason for the activity or action is to conduct some form of take. For instance, conducting a research project that includes collecting and handling ABBs is a form of purposeful take. Intentionally killing or harming ABBs is also purposeful take and is prohibited.

"Incidental take" is defined by the Endangered Species Act as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." For example, bulldozing land for road construction may kill ABBs in the soil, but the purpose of the activity is not to kill ABBs.

"Purposeful take" is when the reason for the activity or action is to conduct some form of take. For instance, conducting a research project that includes collecting and handling ABBs is a form of purposeful take. Intentionally killing or harming ABBs is also purposeful take and is prohibited.

"Federal nexus" phrase used to indicate an activity's connection to a federal agency as a result of that agency authorizing, funding, or carrying out the activity.

"Soil disturbance" Soil disturbance means movement or alteration of soil associated with modifying the existing land use. Soil disturbance includes actions such as grading, filling, soil excavating or topsoil stripping. Soil disturbance also includes non-physical alterations such as chemical treatment, including ground or soil sterilizers, and pesticides that would make the habitat unsuitable. However, typical agricultural levels of applications like liming or fertilizer should not affect American burying beetles, and we do not intend to regulate such practices.

""Suitable Habitat" While the ABB uses a wide variety of habitats, the Service currently believes that areas exhibiting the following characteristics will not be of conservation value to ABBs and will not be credited as mitigation, except as possible buffer credits described below under the Crediting Method section. Areas exhibiting these characteristics should be excluded from mitigation lands because they are considered unfavorable for use by ABBs based on disturbance regime, vegetation structure, unsuitable soil conditions, and carrion availability:

- 1. Land that is tilled on a regular basis, planted in monoculture, and does not contain native vegetation.
- 2. Pasture or grassland that has been maintained through frequent mowing, grazing, or herbicide application at a height of 20 cm (8 inches) or less.
- 3. Land that has already been developed and no longer exhibits topsoil, leaf litter, or vegetation.
- 4. Urban areas with maintained lawns, paved surfaces, or roadways.
- 5. Stockpiled soil without vegetation.
- 6. Wetlands or permanent waterbodies with standing water or saturated soils. Areas adjacent to wetlands and/or riparian areas are not considered unfavorable for the ABB, as they may be important for ABBs seeking moist soils during dry conditions.

"Ranching and grazing" means activities involved in grazing livestock (e.g., cattle, bison, horse, sheep, goats, or other grazing animals) such as: gathering of livestock; construction and maintenance of fences associated with livestock grazing; installation and maintenance of corrals, loading chutes, and other livestock working facilities; development and maintenance of livestock watering facilities; placement of supplements such as salt blocks for grazing livestock; and, when associated with livestock grazing, the control of noxious weeds, haying, mowing, and prescribed burning. Ranching and grazing does not include any form of farming, conversion of grassland to cropland, or management of cropland.

"Conservation Lands" We define "conservation lands" in the Southern Plains analysis areas as lands included within the existing boundaries of Fort Chaffee in Arkansas (approximately 64,000 acres), and McAlester Army Ammunition Plant (approximately 45,000 acres), and Camp Gruber/Cherokee Wildlife Management Area (approximately 64,000 acres). These areas have defined boundaries and management that is compatible with recovery for the American burying beetle.

American Burying beetle habitat impact types:

<u>Temporary impacts</u> are those that impact ABB habitat for 5 years or less (areas impacted by the project are restored to a condition suitable for ABB use within 5 years of the original impact.

<u>Permanent cover change</u> impacts are defined as impacts that change the successional stage of an area to a different stage (e.g., forest or shrubland to grassland; grassland to forest), resulting in habitat that is possibly less preferable for ABB use. Similar to temporary impacts, these areas will be restored to a condition suitable for ABB use within 5 years. However, if these areas will be permanently maintained at a different successional stage (through vegetation control, tree planting, or suppression of natural vegetation), the Service considers the vegetation cover of the area to have been permanently changed.

<u>Permanent impacts</u> are those that eliminate ABB habitat (e.g., buildings, roads, quarries, strip mines), as well as any impact to habitat that that takes more than 5 years to re-establish as suitable for ABB use.