

FOREST STAND IMPROVEMENT ----

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 666



FOREST STAND IMPROVEMENT

To manipulate species of trees by cutting or killing selected trees and understory vegetation.

PRACTICE INFORMATION

This practice applies to forest land where competing vegetation hinders development and stocking of preferred tree and understory species. The preferred species are identified and retained to achieve the intended purpose of improving the stand. Spacing, density and amounts of preferred plants are carefully planned. Consideration is given to the total ecosystem. Timing of treatment and retaining dead or dying trees will help minimize impacts on nesting birds and other

wildlife. Food and cover for wildlife are further retained by minimal modifications of composition and spacing necessary to improve the vegetative cover considering the total natural resource base.

Purposes of this practice include the following:

1. Improve or sustain timber production
2. Improve understory forage production, aesthetics, wildlife habitat, recreation, and hydrologic condition.
3. To harvest forest products
4. To initiate forest stand regeneration.
5. To achieve a combination of purposes

Additional information including standards and specifications for establishment and management of this practice are on file in the local NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: recorded in Microsoft word 6.0 - use tabs to change cells/fields

STATE	Iowa	FIELD OFFICE	DATE	12/5/96
PRACTICE: 666 Forest Stand Improvement			NOTES:	
RESOURCE: SOIL			Help Message: Click on form field for choice lists. Tab key to move around. "N/A" is the default.	
RESOURCE CONCERN: EROSION				
RESOURCE INDICATORS			PHYSICAL EFFECTS	
SHEET AND RILL			slight reduction in sheet and rill erosion	
WIND			slight reduction in wind erosion	
EPHEMERAL GULLY			slight reduction in ephemeral gully erosion	
CLASSIC GULLY			slight reduction in classic gully erosion	
STREAMBANK			slight reduction in streambank erosion	
IRRIGATION INDUCED			N/A	
SOIL MASS MOVEMENT			N/A	
ROADBANK/CONSTRUCTION			slight decrease in roadbank/construction erosion	
OTHER				
RESOURCE CONCERN: SOIL CONDITION				
SOIL TILTH			insignificant	
SOIL COMPACTION			insignificant	
SOIL CONTAMINATION				
• SALTS			N/A	
• ORGANICS			N/A	
• FERTILIZERS			N/A	
• PESTICIDES			N/A	
• OTHER				
DEPOSITION/DAMAGE				
• ONSITE			slight reduction /onsite deposition damage	
• OFFSITE			slight decrease/offsite deposition damage	
DEPOSITION/SAFETY				
• ONSITE			slightly improve onsite safety/deposition	
• OFFSITE			slightly improve offsite safety hazard/deposition	
OTHER				
RESOURCE: WATER				
RESOURCE CONCERN: WATER QUANTITY				
SEEPS			N/A	
RUNOFF/FLOODING			moder. decrease in runoff/flooding	
EXCESS SUBSURFACE WATER			slight reduction in excess subsurface water	
INADEQUATE OUTLETS			N/A	
WATER MGT. IRRIGATION				
• SURFACE			N/A	
• SPRINKLER			N/A	
WATER MGT. NON-IRRIGATED			N/A	
RESTRICTED FLOW CAPACITY (drainage)				
• ONSITE			insignificant	
• OFFSITE			insignificant	
RESTRICTED STORAGE			moderate reduction in sedimentation of H2O storage	
OTHER				

RESOURCE: WATER	
RESOURCE CONCERN: WATER QUALITY	
RESOURCE INDICATORS	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	slight reduction GWater contam./pesticides
• NUTRIENTS AND ORGANICS	slight poten. decrease/GWater contam./nutr,organ.
• SALINITY	slight poten.decrease/GWater contam./salinity
• HEAVY METALS	slight poten. decrease/GWater contam./heavy metal
• PATHOGENS	slight poten. decrease/GWater contam./pathegens
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	slight reduction in SWater contam./pesticides
• NUTRIENTS AND ORGANICS	slight reduction in SWater contam./nutr.,organics
• SUSPENDED SEDIMENTS	moderate reduction in SWater contam./susp. sedi.
• LOW DISSOLVED OXYGEN	insignificant
• SALINITY	insignificant
• HEAVY METALS	slight reduction in SWater contam./heavy metals
• WATER TEMPERATURE	slight reduction in SWater contam./H20 temp.
• PATHOGENS	slight decrease in SWater contam./pathegens
AQUATIC HABITAT SUITABILITY	moderate improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: AIR	
RESOURCE CONCERN: AIR QUALITY	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	insignificant
• OFFSITE SAFETY	insignificant
• ONSITE STRUCT. PROBLEMS	insignificant
• OFFSITE STRUCT. PROBLEMS	insignificant
• ONSITE HEALTH	insignificant
• OFFSITE HEALTH	insignificant
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	insignificant
AIRBORNE CHEMICAL DRIFT	insignificant
AIRBORNE ODORS	insignificant
FUNGI, MOLDS, AND POLLEN	insignificant
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	slight improvement in air condition/temperature
AIR MOVEMENT (windbreak effect)	slight improvement in air condition/ air movement
HUMIDITY	slight inprovement in air condition/ humidity
OTHER	

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	N/A
PRIVATE/PUBLIC VALUES	N/A
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	situational regarding cultural resources
SIGNIFICANCE OF CULTURAL RESOURCES	situational regarding cultural resources
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	situational regarding cultural resources
OTHER	