

## **CONSERVATION ENHANCEMENT ACTIVITY**

E328J



## Improved crop rotation to provide benefits to pollinators

**Conservation Practice 328: Conservation Cropping System** 

APPLICABLE LAND USE: Crop (Annual & Mixed)

**RESOURCE CONCERN: Animals** 

**ENHANCEMENT LIFE SPAN: 1 year** 

### **Enhancement Description**

Improve the existing crop rotation by adding pollinator friendly crops into the rotation. The crop rotation shall include a minimum of three different crops in a minimum five-year crop rotation. Each year, the pollinator friendly crop will be planted on a minimum of 5% of cropland acres contained within the agricultural operation. Use of insecticides is limited for the pollinator friendly crop.

### **Criteria**

- Crops will be grown in a planned sequence over a five-year rotation. The crop
  rotation shall include a minimum of three different crops in a minimum five-year crop
  rotation.
- The crop rotation must include at least one pollinator friendly. For these criteria, a
  pollinator friendly cover crop is considered a different crop. A pollinator friendly crop
  is defined as a crop, planted for harvest or as a cover crop, which provides nectar for
  pollinators and other beneficial insects. Examples of pollinator friendly crops are
  canola, sunflowers, clovers, and borage. To meet the purpose and definition of a
  pollinator friendly crop, these "flowering" crops must be allowed to bloom prior to
  harvest or termination. <REFER TO STATE SPECIFIC LIST OF POLLINATOR FRIENDLY
  CROPS>

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 Each year the enhancement is planned, the pollinator friendly crop will be planted on a minimum of 5% of cropland acres contained within the agricultural operation. Plan/contract the actual acres planted to the pollinator friendly crop.



- Where applicable, plan suitable crop substitutions when the planned crop cannot be planted due to weather, soil conditions, or other local situations.
- Foliar systemic insecticides may not be applied to the pollinator friendly crop.
- Insecticides may not be applied during crop bloom period of the pollinator friendly crop.





<b>Documentation and</b>	<u>Implementation</u>	Requirements
Participant will:		



Pal	rticipant will.	SIEWARDSHIP
	Prior to implementation, provide NRCS with the current and planned crop rotation for all cropland acres on the operation. <refer list="" of="" pollinator<="" specific="" state="" td="" to=""><td>PROGRAM</td></refer>	PROGRAM
	Prior to implementation, as needed, NRCS can provide tech pollinator crops for the crop rotation or substitute species enhancement.	_
	Prior to implementation, provide maps for review by NRCS including areas which will include the pollinator friendly crois planned, at least 5% of the cropland acres on the operation pollinator friendly crop.	ops. Each year the enhancement

## **Current Management Rotation (complete table for each rotation)**

Field	Current Crops (in sequence)	Planting Date	Harvest Date

# Planned Management Rotation including Pollinator Friendly Crops (complete table for each rotation)

Field	Planned Crops (in sequence)	Planting Date	Harvest Date	Acres in rotation
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Crop

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**Field** 

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 During implementation, maintain records of any insecticide applications to the pollinator friendly crop, including timing, material/product, application rate, and crop stage.

Insecticide

**Applied** 



**Crop Stage** 

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**Application Rate** 

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		•	_	made, complete operiod and provide			<mark>cumen</mark> t the	!
		mplementation, nentation meets	•	ide application re ent criteria.	cords to NRCS	S for <mark>revie</mark>	w to verify	
NR	CS will	:						
		• •		e in selecting polli e criteria of the en	•	or the cro	p rotation	or
	As nee	eded, provide ado	ditional assistan	ce to the participa	int a <mark>s request</mark>	ed.		
		•	•	p rotation meets				
	year tl 5% of	ne enhancement cropland acres co	is planned the រ ontained within	ree different crop pollinator friendly the operation. <i>Pla</i>	crop must be	planted	on a minim	um of
	•	llinator friendly c	•					
				planned changes in the enh			cide applica	ations,

August 2019

**Application Date** 



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☐ After implementation, if there were any changes to planned rotation or management evaluate the applied crop rotation using information provided from the participant to verify the applied rotation meets the enhancement criteria.



After implementation, review insecticide application records to verify implementation meets the enhancement criteria.

#### **NRCS Documentation Review:**

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name	Contract Number	ontract Number			
Total Amount Applied	Fiscal Year Completed				
NRCS Technical Adequacy Signature	Date				

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## **North Dakota Pollinator Friendly Field Crops List**

Buckwheat*
camelina
canola
lentil
lupine
mustard, tame
rapeseed
safflower
sunflower
winter canola
chickpea (Kabuli & Desi)
horse bean (fava)
field pea

#### North Dakota Sideboards:

Producers will ensure the seed used is not treated with insecticides.

The planned pollinator friendly crop specie(s) must be new to the planned crop rotation. NRCS will review and document the latest four years of the producer's FSA crop history data to verify the planned pollinator friendly crop is new to the planned crop rotation.

Only annual crops raised for grain/oilseed are eligible.

Only pay the acres where the new pollinator friendly crop will be planted each year.

\*Buckwheat (Fagopyrum esculentum) can cause certain allergenic reactions similar to peanut allergies. Buckwheat has a high percent of hard seed and volunteers easily in no-till systems and can become weedy in subsequent crops. To minimize the potential of buckwheat contamination in cereal crops (wheat, winter wheat, barley, oats), buckwheat is not recommended in cover crop and pollinator mixes planned in crop rotations with cereal crops or in areas adjacent (within 30 feet) of cereal crop fields.