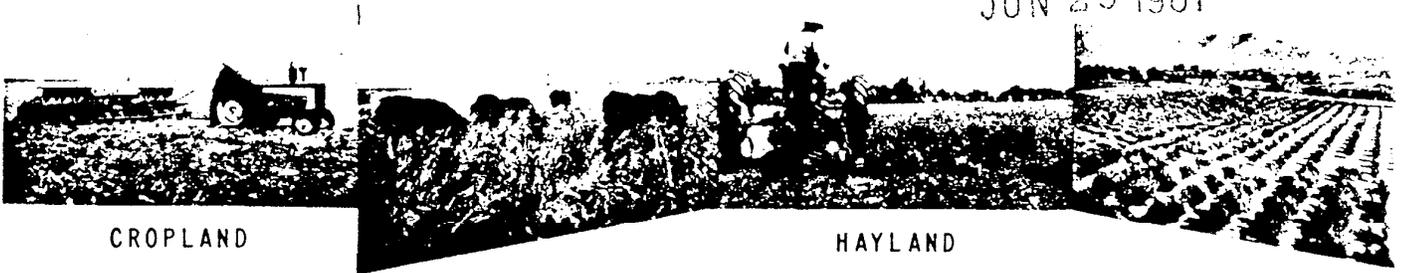


CONSERVATION AGRONOMY TECHNICAL NOTES

PASTURELAND

JUN 26 1981

ORCHARD



CROPLAND

HAYLAND

U. S. DEPARTMENT OF AGRICULTURE

NEW MEXICO

SOIL CONSERVATION SERVICE

NOTE NO. 32

June 18, 1981

SEARCHED	INDEXED
SERIALIZED	FILED
JUN 18 1981	
FBI - ALBUQUERQUE	

RE: FUEL REQUIRED FOR FIELD OPERATIONS

Due to the recent escalation in fuel costs, a great deal of interest has developed in various systems of conservation tillage, minimum tillage, and no-till planting.

The attached data provides fuel requirements, both diesel and gasoline, for nearly every type of field operation. The information is based on data from "hundreds of farmers" gathered by Iowa State University and was reported by Tom Curl in The Progressive Farmer in November 1980. The data is dependable for the South and Southwest as well as other parts of the nation.

The attached data can be used when working with cooperators to give an accurate estimate of the fuel savings for various tillage systems. By inserting local fuel costs, an accurate figure can be determined for each system and the fuel savings for minimum tillage systems can be easily determined.

William W. Fuller
State Agronomist

Attachment

AO

WTSC, Portland, OR - 2

Adjoining States - 1

Director, Plant Sciences Division, SCS, Washington - 2

11-64

4-L-1944

FUEL REQUIRED FOR FIELD OPERATIONS

	Gallons Per Acre	
	Gasoline	Diesel
<u>Field Operations</u>		
Fertilization		
Spreading dry	0.20	0.15
Anhydrous Ammonia (30"rows)	0.80	0.60
<u>Tillage</u>		
Shredding Cornstalks	0.70	0.50
Moldboard Plow	2.70	1.90
Chisel Plow	1.70	1.20
Offset disc	1.35	0.95
Powered Rotary Tiller	2.30	1.60
Tandem disc, plowed field	1.00	0.70
Tandem disc, tilled field	0.85	0.60
Tandem disc, cornstalks	0.70	0.50
Field-cultivate, plowed field	1.15	0.80
Field-cultivate, tilled field	1.00	0.70
Springtooth harrow, plowed field	1.00	0.70
Springtooth harrow, tilled field	0.85	0.60
Pegtooth harrow, tilled field	0.45	0.30
<u>Planting (30 inch row)</u>		
Planter, seed only, tilled seedbed	0.65	0.45
Planter with fertilizer and pesticide and attachments, tilled seedbed	0.85	0.60
Till-planter (sweep)	0.85	0.60
No-till planter (fluted Coulter)	0.70	0.50
Harrow-plant Combination	1.30	0.90
Rotary strip till-plant	1.50	1.05
Grain Drill	0.50	0.35
Broadcast seeder	0.20	0.15
<u>Weed Control (30 inch rows)</u>		
Sprayer, trailer type	0.15	0.10
Rotary hoe	0.30	0.12
Sweep Cultivator	0.65	0.45
Rolling Cultivator	0.60	0.40
Cultivator with disc hillers	0.65	0.45
Powered rotary cultivator	1.00	0.70