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NF98-373 Preparation and Use of Wheatgrass Stands after CRP and Associated Costs/Income — Part II

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NF98-373

Preparation and Use of Wheatgrass Stands after CRP and Associated Costs/Income — Part II

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The following sample worksheet and worksheet can be used to calculate costs and income for your specific operation. For more information on preparing and using wheatgrass stands following CRP, please see the companion publication, *Preparation and Use of Wheatgrass Stands after CRP and Associated Costs/Income — Part I*, NF98-372.

Fence & Water Cost Budget

Example

Fencing Costs ____160____ acres Ownership Costs	(Purchase Cost	+	Salvage / Value)	Useful Life	=	Annual Deprec.
Perimeter Fence ____4-strand barbed____ 10,560 feet @ $ .57 / ft	(6,019.20	+	0	)/ 30 yrs	=	200.64
Interior Fence __3-strand HTE wire____ 5,280 feet @ $ .41 / ft	(2,164.80	+	0	)/ 25 yrs	=	86.59
Gates 4 @ $ 50.00 / gate	(200.00	+	0	)/ 20 yrs	=	10.00
Energizer	(300.00	+	0	)/ 15 yrs	=	20.00
Total	(8,684.00	+	0	)	=	317.23
Subject to Personal Property Tax*	2,464.80	+	0		=	106.59

Annual Depreciation Costs per Acre Total Annual Deprec./Acres

$ 317.23 / 160 acres = 1 1.98

Average Annual Investment

(Value Beg. Yr 1 + Value Beg. Last Yr of Use)/2 =
(Purchase Cost + Salvage Value + Annual Deprec.)/2 =

Total	($ 8,684.00	+ $ 0	+ $ 317.23	)/2 = $ 4,500.62
Personal Property	($ 2,464.80	+ $ 0	+ $ 106.59	)/2 = $ 1,285.70

Annual Interest Costs per Acre

Average Annual Investment x (Interest Rate/100)/acres

$ 4,500.62 x (6 %/100) = $ 270.04 / 160 acres = 2 1.69

Annual Personal Property Tax per Acre

Average Annual Investment subject to PP Tax x (Tax Rate/100)/acres

$ 1,285.60 x (2 %/100) = $ 25.71 / 160 acres = 3 .16

Operating Costs

Annual Fence Repair Costs per Acre

2 miles @ $ 42.00 /mile/year = $ 84.00 / 160 acres = 4 .53

Annual Energy Costs per Acre

30 kwh/month x 5 months =

150 kwh @ $ .0935 /kwh = $ 14.03 / 160 acres = 5 .09

Total Annual Fencing Costs per Acre Sum of lines 1 through 5 = 6 4.45

Water System Costs 160 acres Ownership Costs	(Purchase Cost	+	Salvage / Value)	Useful Life	=	Annual Deprec.
Well 150 feet @ $ 11.08 /ft	(1,662.00	+	0)/	25 yrs	=	66.48
Pipe 130 feet @ $ 10.50 /ft	(1,365.00	+	0)/	15 yrs	=	91.00
Pump 1 hp	(680.00	+	0)/	15 yrs	=	57.33
Pressure Tank 50 gal	*(820.00	+	0)/	20 yrs	=	41.00
11 ft Tanks 1 @ $ 360.00 /tank	*(360.00	+	0)/	10 yrs	=	36.00
1 Floats & valves @ $ 30.00 /tank	*(30.00	+	0)/	5 yrs	=	6.00
Electrical Service	(300.00	+	0)/	50 yrs	=	6.00
Total	5,217.00		0			303.81
Subject to Personal Property Tax*	1,890.00		0			89.00

Annual Depreciation Costs per Acre = Total Annual Deprec./Acres = Per Acre

$ 303.81 / 160 acres = 7 1.90

Average Annual Investment =

(Value Beg. Yr 1 + Value Beg. Last Yr of Use)/2 =

Total ($ 5,217.00 + $ 0 + $ 303.81)/2 = $ 2,760.41

Personal Property ($ 1,890.00 + $ 0 + $ 89.00)/2 = $ 989.50

Annual Interest Costs per Acre =

Average Annual Investment x (Interest Rate/100)/acres

$ 2,760.41 x (6 %/100) = $ 165.62 / 160 acres = 8 1.04

Annual Personal Property Tax per Acre

Average Annual Investment subject to PP Tax x (Tax Rate/100)/acres

$ 989.50 x (2 /100) = $ 19.79 / 160 acres = 9 .12

Pumping Costs

Hours Pumping =

70 head x 20 gals/days x 30 days = 42,000 gals

42,000 gals/ 10 gpm = 4,200 minutes/60 = 70 hours

kwh cost = 70 hours @ 1.5 kw/hr = 105 kwh @ $ .0935 /kwh $ 9.82

Repair Costs = 70 hours @ $ .07 /hr = $ 4.90

Meter Charge = $ 8.50 /month x 1 months = $ 8.50

Total $ 23.22

Pumping Costs per Acre = $ Total/acres = $ 23.22 / 160 acres = 10 .15

Total Annual Water Costs per Acre Sum of lines 7 through 10 = 11 3.21

Fence & Water Cost Budget

Example

Fencing Costs _____ acres Ownership Costs	(Purchase Cost	+	Salvage / Value)	Useful Life	=	Annual Deprec.
Perimeter Fence _____ _____ feet @ $ _____/ ft	(_____	+	_____)/	_____ yrs	=	_____
Interior Fence _____ _____ feet @ $ _____/ ft	(_____	+	_____)/	_____ yrs	=	_____
Gates _____ @ $ _____ / gate	(_____	+	_____)/	_____ yrs	=	_____
Energizer	(_____	+	_____)/	_____ yrs	=	_____
Total	(_____	+	_____)		=	_____
Subject to Personal Property Tax*	_____	+	_____		=	_____

Annual Depreciation Costs per Acre Total Annual Deprec./Acres

$ _____ / _____ acres = 1 _____

Average Annual Investment

(Value Beg. Yr 1 + Value Beg. Last Yr of Use)/2 =
(Purchase Cost + Salvage Value + Annual Deprec.)/2 =

Total ($_____ + $_____ + $_____)/2 = $_____
Personal Property ($_____ + $_____ + $_____)/2 = $_____

Annual Interest Costs per Acre

Average Annual Investment x (Interest Rate/100)/acres
$_____ x (_____%/100) = $_____ / _____ acres = 2 _____

Annual Personal Property Tax per Acre
Average Annual Investment subject to PP Tax x (Tax Rate/100)/acres
$_____ x (_____%/100) = $_____ / _____ acres = 3 _____

Operating Costs
Annual Fence Repair Costs per Acre
_____ miles @ $_____ /mile/year = $_____ /_____ acres = 4 _____

Annual Energy Costs per Acre
_____ kwh/month x _____months =
_____ kwh @ $_____ /kwh = $ _____ / _____ acres = 5 _____

Total Annual Fencing Costs per Acre Sum of lines 1 through 5 = 6_____

Water System Costs _____acres Ownership Costs	(Purchase Cost	+	Salvage / Value)	Useful Life	=	Annual Deprec.
Well _____feet @ $_____ /ft	(_____	+	_____)/	_____ yrs	=	_____
Pipe _____feet @ $ _____/ft	(_____	+	_____)/	_____yrs	=	_____
Pump _____hp	(_____	+	_____)/	_____yrs	=	_____
Pressure Tank _____gal	*(_____	+	_____)/	_____yrs	=	_____
_____ft Tanks _____ @ $ _____/tank	*(_____	+	_____)/	_____yrs	=	_____
_____Floats & valves @ $ _____/tank	*(_____	+	_____)/	_____yrs	=	_____
Electrical Service	(_____	+	_____)/	_____yrs	=	_____
Total	_____		_____			_____
Subject to Personal Property Tax*	_____		_____			_____

Annual Depreciation Costs per Acre = Total Annual Deprec./Acres = Per Acre

$_____ / _____ acres = 7_____

Average Annual Investment =

(Value Beg. Yr 1 + Value Beg. Last Yr of Use)/2 =

Total ($_____ + $_____ + $_____)/2 = $_____
Personal Property ($_____ + $_____ + $_____)/2 = $_____

Annual Interest Costs per Acre =
Average Annual Investment x (Interest Rate/100)/acres
$ _____ x (_____ %/100) = $_____ / _____ acres = 8_____

Annual Personal Property Tax per Acre
Average Annual Investment subject to PP Tax x (Tax Rate/100)/acres
$ _____ x (_____/100) = $ _____/ _____ acres = 9_____

Pumping Costs
Hours Pumping =
_____ head x _____ gals/days x _____ days = _____ gals

_____ gals/ _____ gpm = _____minutes/60 = _____hours

kwh cost = _____ hours @ _____ kw/hr = _____kwh @ $_____/kwh $_____
Repair Costs = _____ hours @ $ _____/hr = $_____
Meter Charge = $ _____/month x _____months = $_____
Total $_____

Pumping Costs per Acre = $ Total/acres = $ _____/ _____ acres = 10_____

Total Annual Water Costs per Acre Sum of lines 7 through 10 = 11_____

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Kenneth R. Bolen, Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.

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