

Abbreviated Narrative From Consultant's Report

Bruse Estate Property – 280 Acres, m/l

Location: Section 26,27 Iowa Twp.

T.85N.-R.6E.

Jackson County, Iowa

This is a very unique farm located along the bluffs of the Mississippi River. The bluffs have outstanding panoramic views of the river valley. Steep bluffs, limestone rock outcrops and sinkholes are also located on the parcel. About 103 acres are currently in CRP program and planted with grasses. Most of the timber was located 30-40 years ago and the edges were cleared in the past. Most of the timber has very large oak sawtimber in the ravines and walnut and honeylocust along the field edges. Currently timber markets for oak are poor due to the housing slow down. When timber markets improve some of the larger trees could be harvested at any time. The timber has been divided into 3 stands as follows:

Stand 1 (71 acres)

This stand is located along several very steep ravines that drain to the north. The field edges are dominated with honeylocust, elm and walnut. The ravines are dominated with large red oak, maple basswood and walnut sawtimber. This stand has excellent quality sawtimber with a total of 3,730 bdf/acre.

Stand 2 (80 acres)

This stand is located along a series of ravines that drain to the northeast. Much of the stand has had trees cut many years ago but has scattered pockets of large sawtimber red oak, maple, walnut, ash, basswood, red elm and cherry. This stand has 3,367 bdf per acre.

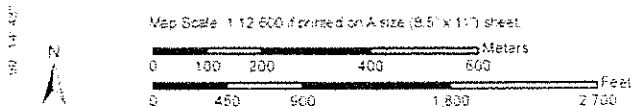
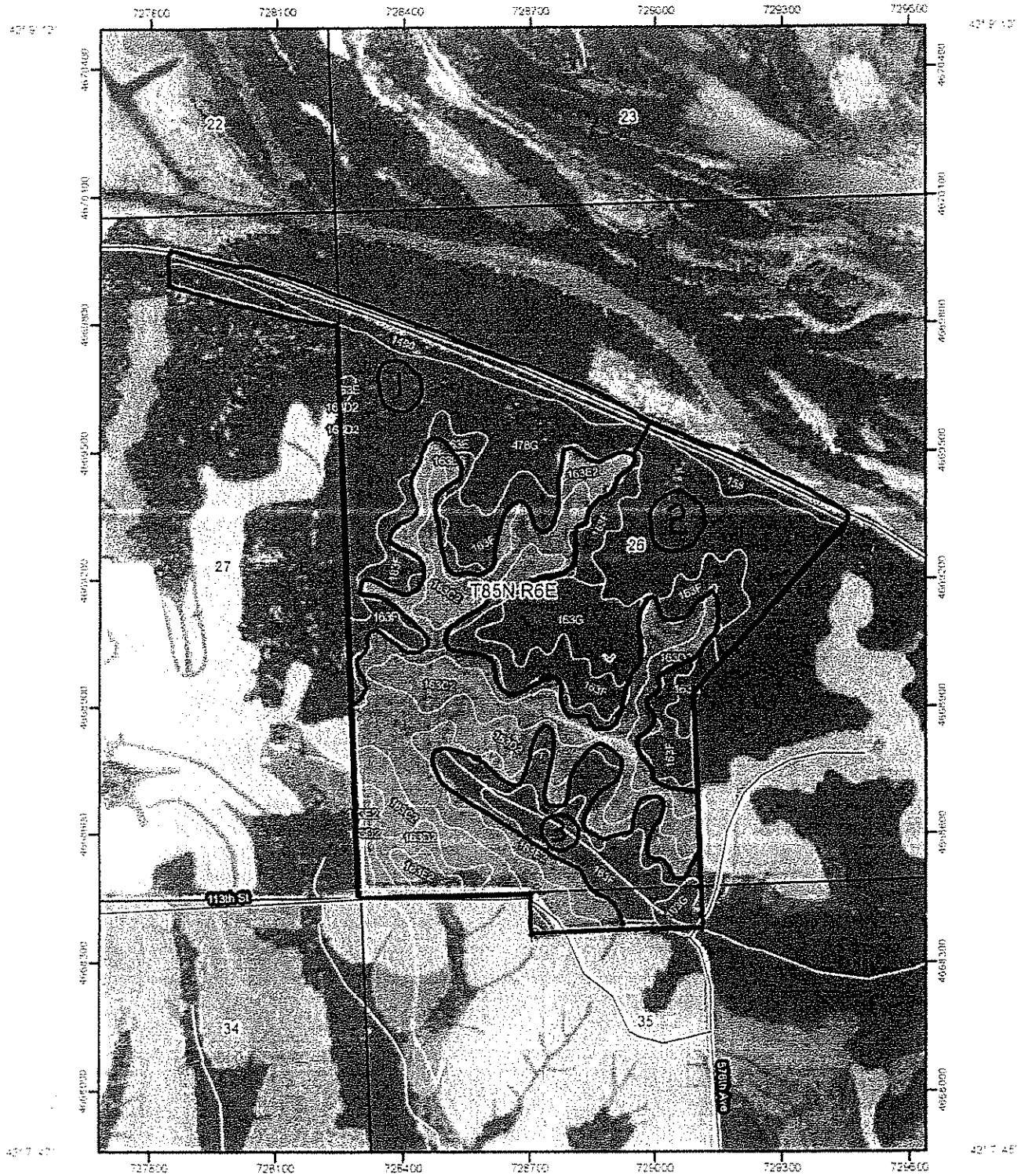
Stand 3 (24 acres)

This stand is located along a ravine that drains to the southeast. Most of this stand is dominated with walnut, red oak, elm, box elder, honeylocust, ash, cottonwood and basswood. The southeast portion of the stand has some large walnut sawtimber. This stand has 2,858 bdf per acre.

Summary

This is a one-of-a-kind very unique parcel with a 175 forested acres. With good management this property will provide sustainable long-term timber production.

TIMBER STANDS
280 Acres, m/l, Bruse Estate
Soil Map – Jackson County, Iowa
(Hazel Bruse)



Tract Name: Stand 1 – 71 Acres, m/l
Farm Name: 280 Acres, m/l, Bruse Estate

Total Acres in Stand: 71
 Year Data Collected: 2012
 Age of Stand: years.
 Site Index Species: Northern Red Oak
 Site Index of Site Species: 80 at 50 years.
 Average Trees per Acre: 97
 Sampling Technique: Point with 10 baf prism.

The following results are for the initial condition of the stand.

The basal area, volume, and value per acre of each species are:

Species	Trees (#/Ac)	Basal area (Sq Ft/Ac)	Sawlog volume (BF/Ac)
5 - Northern Red Oak	14.1	21.4	1918
12 - White Oak	0.9	0.7	0
13 - Bitternut Hickory	0.4	1.4	158
20 - Sugar Maple	21.5	12.1	488
21 - American Elm	23.1	4.3	0
22 - Slippery Elm	7.7	4.3	156
25 - White Ash	4.1	1.4	59
26 - American Basswood	4.1	5.0	293
29 - Black Cherry	9.1	2.9	53
31 - Black Walnut	8.6	6.4	410
36 - Hackberry	2.0	2.1	125
37 - Honeylocust	1.2	1.4	71
Total	96.9	63.6	3730

DBH	Trees/Ac	Sq Ft/Ac	Sawlog BF/Ac
4	16.4	1.4	0
6	32.7	6.4	0
8	8.2	2.9	0
10	5.2	2.9	0
12	13.6	10.7	359
14	2.7	2.9	116
16	7.7	10.7	763
18	3.2	5.7	466
20	2.0	4.3	321
22	2.4	6.4	636
24	1.8	5.7	655
26	0.6	2.1	263
28	0.2	0.7	72
>=29.0	0.1	0.7	78
Total	96.9	63.6	3730

Diameter of tree of average basal area = 11

SUMMARY OF VOLUMES	Average (Volume/Ac)	95% Conf. Interval (Volume/Ac)	SE of Ave. (Volume/Ac)	SE of Ave. (%)	Total	SE of Total
Sawtimber (BF)	3730	2594 - 4867	526	14	264852	37364
SUMMARY OF VALUES	Average (\$/Ac)	95% Conf. Interval (\$/Ac)	SE of Ave. (\$/Ac)	SE of Ave. (%)	Total	SE of Total
Sawtimber	1712	939 - 2485	358	21	121567	25402

Tract Name: Stand 2 – 80 Acres, m/I
Farm Name: 280 Acres, m/I, Bruse Estate

Total Acres in Stand: 80
 Year Data Collected: 2012
 Age of Stand: years.
 Site Index Species: Northern Red Oak
 Site Index of Site Species: 80 at 50 years.
 Average Trees per Acre: 124
 Sampling Technique: Point with 10 baf prism.

The following results are for the initial condition of the stand.

The basal area, volume, and value per acre of each species are:

Species	Trees (#/Ac)	Basal area (Sq Ft/Ac)	Sawlog volume (BF/Ac)	DBH	Trees/Ac	Sq Ft/Ac	Sawlog BF/Ac
				4	43.0	3.7	0
				6	22.3	4.4	0
				8	21.5	7.5	0
				10	10.3	5.6	0
				12	6.4	5.0	190
				14	7.0	7.5	365
				16	5.4	7.5	525
				18	1.4	2.5	198
				20	1.7	3.7	322
				22	3.1	8.1	819
				24	1.2	3.7	396
				26	0.5	1.9	168
				28	0.1	0.6	46
				>=29.0	0.6	3.1	338
1 - Black Oak	0.2	0.6	70				
5 - Northern Red Oak	13.3	18.1	1383				
12 - White Oak	0.2	0.6	70				
13 - Bitternut Hickory	4.8	1.9	32				
16 - Shagbark Hickory	7.5	1.2	35				
17 - Boxelder	1.1	0.6	0				
20 - Sugar Maple	30.2	10.0	402				
21 - American Elm	2.9	1.2	0				
22 - Slippery Elm	16.9	3.1	98				
25 - White Ash	8.3	3.7	93				
26 - American Basswood	2.0	2.5	174				
29 - Black Cherry	9.0	5.0	232				
31 - Black Walnut	8.0	4.4	182				
36 - Hackberry	14.1	3.7	95				
37 - Honeylocust	2.8	5.0	318				
46 - Aspen	0.4	0.6	52				
47 - River Birch	2.5	2.5	131				
Total	124.4	65.0	3367	Total	124.4	65.0	3367

Diameter of tree of average basal area = 9.8

SUMMARY OF VOLUMES	Average (Volume/Ac)	95% Conf. Interval (Volume/Ac)	SE of Ave. (Volume/Ac)	SE of Ave. (%)	Total	SE of Total
Sawtimber (BF)	3367	2350 - 4384	477	14	269364	38190
SUMMARY OF VALUES	Average (\$/Ac)	95% Conf. Interval (\$/Ac)	SE of Ave. (\$/Ac)	SE of Ave. (%)	Total	SE of Total
Sawtimber	1341	779 - 1903	264	20	107266	21105

Tract Name: Stand 3 – 24 Acres, m/l
Farm Name: 280 Acres, m/l, Bruse Estate

Total Acres in Stand: 24

Year Data Collected: 2012

Age of Stand: years.

Site Index Species: Northern Red Oak

Site Index of Site Species: 80 at 50 years.

Average Trees per Acre: 151

Sampling Technique: Point with 10 baf prism.

The following results are for the initial condition of the stand.

The basal area, volume, and value per acre of each species are:

Species	Trees (#/Ac)	Basal area (Sq Ft/Ac)	Sawlog volume (BF/Ac)
1 - Black Oak	6.6	14.0	1218
17 - Boxelder	20.5	12.0	0
21 - American Elm	71.1	10.0	227
25 - White Ash	14.4	8.0	297
26 - American Basswood	0.9	2.0	206
31 - Black Walnut	4.1	6.0	434
35 - Eastern Cottonwood	0.2	2.0	299
36 - Hackberry	27.3	6.0	177
46 - aspen	5.7	2.0	0
Total	150.9	62.0	2858

DBH	Trees/Ac	Sq Ft/Ac	Sawlog BF/Ac
4	91.7	8.0	0
6	10.2	2.0	0
8	11.5	4.0	0
10	14.7	8.0	0
12	5.1	4.0	148
14	3.7	4.0	0
16	2.9	4.0	206
18	3.4	6.0	412
20	3.7	8.0	536
22	2.3	6.0	624
24	1.3	4.0	422
26	0.0	0.0	0
28	0.0	0.0	0
>=29.0	0.6	4.0	509
Total	150.9	62.0	2858

Diameter of tree of average basal area = 8.7

SUMMARY OF VOLUMES	Average (Volume/Ac)	95% Conf. Interval (Volume/Ac)	SE of Ave. (Volume/Ac)	SE of Ave. (%)	Total	SE of Total
Sawtimber (BF)	2858	630 - 5085	802	28	68591	19258
SUMMARY OF VALUES	Average (\$/Ac)	95% Conf. Interval (\$/Ac)	SE of Ave. (\$/Ac)	SE of Ave. (%)	Total	SE of Total
Sawtimber	1073	0 - 2166	394	37	25756	9451