

Hello, I'm a gatherer; some people like fighting, some like fashion, others like socializing, and I like producing, manufacturing, and selling things :D  
 If you like gathering and producing things as well, I hope these personal notes of mine I use for my own gathering help you out in yours :D

~Partisan from Ruairi

#### Partisan's Gathering Notes - On Gathering Knives and Wool in Relation to Thick Thread Production

This note contain information on wool production with regards to three variables: the type of knife used by the player, the skill of the player, and whether the player is shearing alone or with the help of a partner. It is an attempt to quantify which tools at what skill are best to obtain the most wool in a given amount of time, and what type of knife to use in order to obtain the most profits in regards to thick thread production. Other applications include finding which path to pursue to obtain the most wool the fastest regardless of cost. The tables below include the following information (based on the MWW):

Shear time:	The amount of time it takes to complete one shearing, measured in seconds.
Wool/Min:	The amount of wool attainable per minute of shearing, calculated as : 60 seconds / (Shear time) *Note this means one FULL minute of shearing, delays between shears and switching sheep are not counted in that minute.
Bonus Wool:	The average amount of wool expected due to bonuses(stated in parentheses) resulting either from higher levels of shearing mastery, partners, or knife upgrades, calculated as : (Wool/Min) * (Bonus percentage) * 0.01
Repair/Use:	The amount of gold needed to repair the weapon after one use, calculated as : (Cost of One Repair Point) / 20
Revenue:	The total amount of gold able to be gotten for the wool gathered, calculated as : 200 * [(Wool/Min) + (Bonus Wool)]
Costs:	The total repair costs of using the knife calculated as : (Repair/Use) * (Wool/Min)
Profit:	The net profit for shearing one full minute, calculated as : (Revenue) - (Costs)

Some simplifying assumptions have been made to make calculations easier, but they are assumed to be negligible:

1. All the wool will eventually be turned to thick thread.
2. All thick thread sold will be sold at a rate of 5k/stk, for a total of 200g/wool.
3. The player has access to reliable weaving such that any losses in material while producing threads are negligible.
4. Any extra wool not accounted for by the the bonus (eg. from lucky gathers, VERY lucky gathers, strangers dropping piles of wool next to you, etc) are negligible.
5. The player will gather for a suitable amount of time such that the random bonuses converge on their stated value(you will IN THE LONG RUN get the stated xx% bonus wool)
6. The player wants to keep their knife as long as possible and always repairs their knife at Edern or an equally skilled/expensive blacksmith, and always keeps it blessed.
7. The player is not on any other efficiency altering items/services (such as high speed gathering potions).

These are the tables for a player with various levels of skill and equipment, the skill levels shown are N, F, 9, 5, and 1. This is because these are the levels where gathering time changes, and it is assumed the few percent bonuses inbetween are negligible. The types of knives are: basic with no upgrades, fastest knife possible, fast knife with higher durability, fastest knife possible with double gather, fast knife with double gather and higher durability. The first five tables are for a single player, with the bottom five for players getting help from partners.

#### Basic Gathering Knife (No Upgrades)

Rank	N	F	9	5	1
Shear Time	5	4.5	4	3.5	3
Wool/Min	12	13	15	17	20
Bonus Wool	0(0%)	0(1%)	1(7%)	2(12%)	4(20%)
Repair/Use	1g	1g	1g	1g	1g
Revenue	2,400g	2,600g	3,200g	3,800g	4,800g
Costs	12g	13g	15g	17g	20g
Profit	2,388g	2,587g	3,185g	3,783g	3,880g

#### Fastest Knife (Fastest Collection Upgrade Sequence)

Rank	N	F	9	5	1
Shear Time	2.5	2	1.5	1	0.5
Wool/Min	24	30	40	60	120
Bonus Wool	0(0%)	0(1%)	3(7%)	7(12%)	24(20%)
Repair/Use	116g	116g	116g	116g	116g
Revenue	4,800g	6,000g	8,600g	13,400g	28,800g
Costs	2,784g	3,480g	4,640g	6,960g	13,920g
Profit	2,016g	2,520g	3,960g	6,440g	14,880g

#### DuraFast Gathering Knife (Fast Collection High Durability Upgrade Sequence)

Rank	N	F	9	5	1
Shear Time	2.75	2.25	1.75	1.25	0.75
Wool/Min	21	27	34	48	80
Bonus Wool	0(0%)	0(1%)	2(7%)	6(12%)	16(20%)
Repair/Use	87g	87g	87g	87g	87g
Revenue	4,200g	5,400g	7,200g	10,800g	19,200g
Costs	1,821g	2,349g	2,958g	4,176g	6,960g
Profit	2,379g	3,051g	4,242g	6,624g	12,240g

#### DoubleFast Gathering Knife (Double Collection Fast Collection Upgrade Sequence)

Rank	N	F	9	5	1
Shear Time	4	3.5	3	2.5	2
Wool/Min	15	17	20	24	30
Bonus Wool	6(40%)	7(41%)	9(47%)	12(52%)	18(60%)
Repair/Use	68g	68g	68g	68g	68g
Revenue	4,200g	4,800g	5,800g	7,200g	9,600g
Costs	1,020g	1,156g	1,360g	1,632g	2,040g
Profit	3,180g	3,644g	4,440g	5,568g	7,560g

#### DuraDouble Gathering Knife (Double Collection High Durability Upgrade Sequence)

Rank	N	F	9	5	1
Shear Time	4.25	3.75	3.25	2.75	2.25
Wool/Min	14	16	18	22	27
Bonus Wool	6(40%)	6(41%)	8(47%)	11(52%)	16(60%)
Repair/Use	51g	51g	51g	51g	51g
Revenue	4,000g	4,400g	5,200g	6,600g	8,600g
Costs	714g	816g	918g	1,122g	1,377g
Profit	3,286g	3,584g	4,282g	5,478g	7,223g

These are the tables for a player with a partner helping him/her.

#### Basic Gathering Knife (No Upgrades), With Partner

Rank	N	F	9	5	1
Shear Time	5	4.5	4	3.5	3
Wool/Min	12	13	15	17	20
Bonus Wool	12(100%)	13(101%)	16(107%)	19(112%)	24(120%)
Repair/Use	1g	1g	1g	1g	1g
Revenue	4,800g	5,200g	6,200g	7,200g	8,800g
Costs	12g	13g	15g	17g	20g
Profit	4,788g	5,187g	6,185g	7,183g	8,780g

#### Fastest Knife (Fastest Collection Upgrade Sequence), With Partner

Rank	N	F	9	5	1
Shear Time	2.5	2	1.5	1	0.5
Wool/Min	24	30	40	60	120
Bonus Wool	24(100%)	30(101%)	43(107%)	67(112%)	144(120%)
Repair/Use	116g	116g	116g	116g	116g
Revenue	9,600g	12,000g	16,600g	25,400g	52,800g

Costs	2,784g	3,480g	4,640g	6,960g	13,920g
Profit	6,816g	8,520g	11,960g	18,440g	38,880g

DuraFast Gathering Knife (Fast Collection High Durability Upgrade Sequence), With Partner

Rank	N	F	9	5	1
Shear Time	2.75	2.25	1.75	1.25	0.75
Wool/Min	21	27	34	48	80
Bonus Wool	21(100%)	27(101%)	36(107%)	54(112%)	96(120%)
Repair/Use	87g	87g	87g	87g	87g
Revenue	8,400g	10,800g	14,000g	20,400g	35,200g
Costs	1,821g	2,349g	2,958g	4,176g	6,960g
Profit	6,579g	8,451g	11,042g	16,224g	28,240g

DoubleFast Gathering Knife (Double Collection Fast Collection Upgrade Sequence), With Partner

Rank	N	F	9	5	1
Shear Time	4	3.5	3	2.5	2
Wool/Min	15	17	20	24	30
Bonus Wool	21(140%)	24(141%)	29(147%)	36(152%)	48(160%)
Repair/Use	68g	68g	68g	68g	68g
Revenue	7,200g	8,200g	9,800g	12,000g	15,600g
Costs	1,020g	1,156g	1,360g	1,632g	2,040g
Profit	6,180g	7,044g	8,440g	10,368g	13,560g

DuraDouble Gathering Knife (Double Collection High Durability Upgrade Sequence), With Partner

Rank	N	F	9	5	1
Shear Time	4.25	3.75	3.25	2.75	2.25
Wool/Min	14	16	18	22	27
Bonus Wool	20(140%)	22(141%)	24(147%)	33(152%)	43(160%)
Repair/Use	51g	51g	51g	51g	51g
Revenue	6,800g	7,600g	8,400g	11,000g	14,000g
Costs	714g	816g	918g	1,122g	1,377g
Profit	6,086g	6,784g	7,482g	9,878g	12,623g

Personal conclusions: While the double gather knives have been better then the speed variants in the past, with the addition of shearing mastery, the speed knives gain a much greater efficiency if a player is able to get to rank 1.