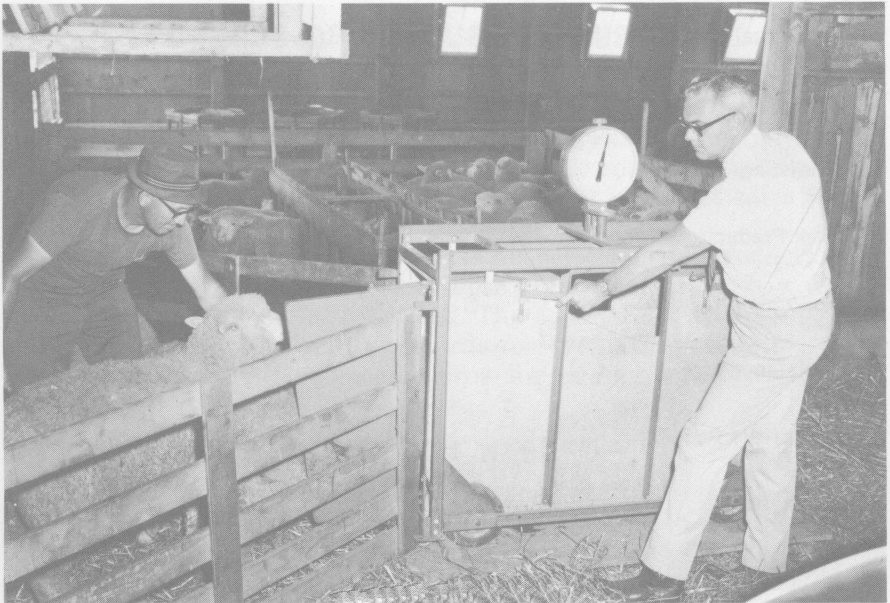# Ohio
SHEEP PRODUCTION
TESTING PROGRAM

a modern program featuring speed, accuracy
and complete information through electronic
data processing

CONTENTS

OHIO SHEEP PRODUCTION TESTING PROGRAM

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The Ohio Production Testing Program for sheep is designed to help Ohio sheepmen realize more profit from their enterprise. The program provides an opportunity to select more accurately ewes that will produce more lambs and wool. To do this, it considers mothering ability, twinning, ability to gain, and wool production.

Adjusted 90-day weights and ratio, a lamb index and ratio, and a ewe index and ratio present different methods of evaluating those animals capable of making the greatest contribution to total flock income. These measures can be used to estimate the overall breeding value of an animal and rank each according to average flock production. These index and ratio values are calculated on a within-flock basis for selecting replacements and culling poor producing animals.

PURPOSE OF PRODUCTION TESTING

A production testing program is not a contest. Its sole purpose is to help both purebred and commercial sheep raisers locate the best producing ewes and rams in their flocks. Rams that sire fast gaining lambs which finish as desirable market lambs will satisfy the commercial sheep raiser and result in repeat sales for the purebred breeder.

The purebred breeder cannot base his selections on production records alone. He must consider these records along with a desirable, practical type for his breed. The commercial sheep raiser should use production testing records for evaluating sires and to select ewe lambs for replacement or for culling low producing ewes.

INFORMATION NEEDED

Information needed for a production testing program is: individual identification of rams, ewes, and lambs; date and type of birth, sex, weaning weights, and rearing of lambs; individual fleece weights and ages of ewes; and the breed of the sire and dam of the lamb.

METHOD OF PROCEDURE

Enrollment: You can enroll your flock through your county Extension agent or by direct contact with the Cooperative Extension Service, Department of Animal Science, Ohio State University.

Identification: To begin a production testing program, you must identify each ewe and her lamb or lambs. Purebred breeders have this job already done through the system required by their respective breed associations. Commercial sheep raisers can ear tag each ewe and her lambs with inexpensive, numbered metal or plastic tags. A good method is to place identical tags in each ear in case a ewe or lamb loses one of the tags. It is important that no two lambs carry the same identification.

Collecting Data: A large field record sheet is provided to list data at birth and at approximately 90 days of age. The original data sheet is returned to Ohio State University for electronic data processing (EDP) and a carbon copy card is retained. This record is started as lambs are dropped and continued until all lambs are weighed at approximately 90 days of age. These data include: all individual identifications, dates, weights, age of ewes, type of birth and rearing, sex of lambs, and breed of each ewe and ram.

An optional phase (see shaded areas of form 109) is provided for you to list other information which is of additional interest to some breeders. The optional information is not used to calculate indices or ratios, but it is summarized.

Wool Weights: Individual fleece weight for each ewe should

Lambs should be weighed at approximately 90 days of age

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FIELD RECORD SHEET.... FORM 109

FLOCK CODE NO _____

RECORD YEAR _____

SHEARING DATE(S)_____

NAME_____
LAST   FIRST   MIDDLE

ADDRESS_____
R.R. #   BOX OR STREET   TOWN   ZIP NO

COUNTY_____   STATE _____

SHEEP PRODUCTION TESTING

FIELD RECORD SHEET

FORM 09

1806

☐ CHECK HERE IF THIS IS THE LAST SET OF RECORDS FOR THIS LAMBING SEASON

USE ONE LINE FOR EACH LAMB

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CHECK IF NEW IN FLOCK	IDENTIFICATION & RECORDS ON EWES									RECORDS ON LAMBS — AT BIRTH									LAMBS — AT 90 DAYS OF AGE								OTHER
	EWE NUMBER	EWE AGE	EWE BREED CODE	WOOL			DATE RAM TURNED IN		LAMB NUMBER	BIRTH DATE		LAMBS BORN 0=0 SN=1 TW=2 TR=3 Q=4	BIRTH WEIGHT	S E X	SIRE		REARING CODE	DATE WEIGHED		WEIGHT	STPL. LNTH	PER CEN	MUSCL ING	TYPE	CODED REW RK	REMARKS
				WT	GRADE	STPL. LNTH.	MO	DAY		MO	DAY				CODE NO	BREED CODE		MO	DAY							
√	●●●●●	●●	●●●●	●●	●	●●●	●●	●●	●●●●●	●●	●●	●	●●	●	●●	●●●●	●	●●	●●	●●●	●	●	●●	●●●●	●●	● ← INDICATES NO OF SPACES TO BE FILLED

be recorded on the field record sheet at the time of shearing. Records can be computed without wool weights; however, it is preferred to include them in the records as wool production is one of the economic traits being evaluated.

Weaning Weights: Lamb production is measured by 90-day weaning weights of the lambs. The use of adjustment factors makes it unnecessary to weigh each lamb at exactly 90 days of age; however, you should try to weigh as close to 90 days of age as possible in order to increase the accuracy of the adjusted weaning weights.

It is not necessary to wean the lambs at 90 days; their weights at this age is the only information that is needed.

INSTRUCTIONS FOR DATA REPORTING

A complete set of instructions on how to list all data on the Field Record Sheet is provided to the cooperating breeder. The record sheet is very important as all data are processed on electronic equipment. This equipment is programmed to accept specific data terminology. For example, a male lamb **MUST** be submitted as a R where R=Ram. If M for male or B for buck is listed, EDP will automatically list this information as an error in the edit program. Another example of the need for specific terminology is in reporting dates. All dates must be listed numercially, as 09/01/70 for September 1, 1970, or 10/01/76 for October 17, 1976.

ADJUSTMENT FACTORS

In order that the production of each ewe in the flock can be compared to others, adjustment factors are used to place each ewe on an equal basis. Consideration is given to the following:

Ninety (90) Day Weights: After lambs of a flock are weighed as near to 90 days of age as practical, they are corrected to exactly 90 days of age by computation. Then, weights are adjusted by using growth rate adjustment factors (Table 1) for type of birth, type of rearing, age of dam, and sex per example (Appendix, item 7). This will place all lambs on an equal 90 days of age basis.

CALCULATIONS

All completed field records are to be submitted to Ohio State University on the field record sheets (form 109) where they are processed by electronic data processing (EDP). EDP lists the computed records two different ways; by sire groups and by potential replacements of ram lambs and ewe lambs. EDP also computes an individual lifetime accumulated performance record for each ewe in the flock. This accumulated record is printed on a separate sheet for each ewe each year, thereby eliminating the

TABLE I* Growth Weight Adjustment Factors

	Age of Dam		
	3 to 6 Yrs. Old	2 Yrs. Or Over 6 Yrs.	1 Yr. Old
Ewe Lamb			
Single	1.00	1.09	1.22
Twin — Raised as Twin	1.11	1.20	1.33
Twin — Raised as Single	1.05	1.14	1.28
Triplet — Raised as Triplet	1.22	1.33	1.46
Triplet — Raised as Twin	1.17	1.28	1.42
Triplet — Raised as Single	1.11	1.21	1.36
Wether			
Single	.97	1.06	1.19
Twin — Raised as Twin	1.08	1.17	1.30
Twin — Raised as Single	1.02	1.11	1.25
Triplet — Raised as Triplet	1.19	1.30	1.43
Triplet — Raised as Twin	1.14	1.25	1.39
Triplet — Raised as Single	1.08	1.18	1.33
Ram Lamb			
Single	.89	.98	1.11
Twin — Raised as Twin	1.00	1.09	1.22
Twin — Raised as Single	.94	1.03	1.17
Triplet — Raised as Triplet	1.11	1.22	1.35
Triplet — Raised as Twin	1.06	1.17	1.31
Triplet — Raised as Single	1.00	1.10	1.25

* National Extension Sheep Committee Report September, 1968, Recommendations for Uniform Sheep Selection Programs, Page 3.

time consuming chore of recopying all information onto the permanent individual ewe card. EDP relists all computed data on previous lambs produced by a specific ewe; then, adds the current year's lambs to this record. EDP will also recompute total and average performance of each ewe as well as summarize her total performance by sex of lamb, type of birth and rearing.

TERMINOLOGY OF COMPUTATIONS OF PROGRAM I

Method of Listing

All records are listed and summarized by breed groups recognizing purebred, single and doublecrossed lambs. If breed of animal is not known, it is listed as a commercial.

Each breeder will receive two listings of his records when enrolled in Plan 1, (1) a conventional listing by sire groups (all ewes mated to a sire are summarized together) and (2) a listing of potential replacements by Ram Lambs and Ewe Lambs. These replacement listings relist the same information on all ram lambs as a group and all ewe lambs as a group, listing them numerically in relation to their flock identification number. These listings permit the breeder to evaluate all potential replacements without sorting through all data. Wether lambs are not relisted.

90-Day Corrected Weight

Since it would be impractical for most breeders to obtain exact 90-day weights on their lambs, weigh them in groups with similar ages. Preferably, you should not go much farther than 10 days either way from the 90-day date. In the above suggested group, lambs would be between 80 and 100 days of age. Twenty days later, the second group should be weighed, etc. Two methods of computations are used. To use the preferred method, the actual birth weight is needed (see Appendix for detailed formula). An alternate method is also programmed into the EDP machine. This method is used if the birth weight of the lamb is not recorded. A specific symbol ($) is printed behind the corrected 90-day weight when this alternate method is used.

Adjusted Weight

After the lamb's weight is corrected to 90 days, it is then adjusted using a multiplicative factor including sex, type of birth, type of rearing and age of dam. These multiplicative factors are those recommended by the National Extension Sheep Research Committee for adjusting lamb weaning weights as listed in Table 1.

Adjusted Weight Ratio

This feature of the program involves the average weight of all lambs produced within their sex group. EDP establishes a weight ratio of 100 for this average adjusted weight. All adjusted lamb weights above or below this average will be listed proportionally above or below 100 as an adjusted weight ratio. For example, a lamb with a weight ratio of 123 would mean that its weight is 23% above the average lamb weight in the flock. If another lamb has a ratio of 89, this would mean that his weight is 11% below the average.

Lamb Index

The lamb index estimates the genetic value of each lamb. This index is especially valuable for selecting replacement stock. It will also suggest differences between twins. The design of this index includes the adjusted weight, multibirth and rearing effects and .6 the fleece weight of the dam.

Lamb Index Ratio

This ratio is calculated like the adjusted weight ratio, but uses the average lamb index to establish the ratio.

Ewe Index

The ewe index is a numerical figure suggesting the genetic merit of the ewe based on what she has produced in a given season. This index includes the summation of the average ad-

justed lamb weights, multibirth and rearing effect, and fleece weight of the dam.

Ewe Index Ratio

Ewe index ratio is designed similar to the lamb index ratio but uses the average ewe index within the breed of lamb group to establish the ratio.

Optional Phases

Optional phases of the program are left blank, if no data is recorded. A breeder can use any or all of these optional columns to fit his own records. The optional information will not be used in calculating indices or ratios but is summarized if submitted. Coding system suggestions are listed in the Reporting Instructions.

Coded Remarks

For convenience and to conserve space, a list of more probable remarks have been coded. One or two coded remarks can be printed for each lamb. The list of codes can be found in the Reporting Instructions.

Summarization

The program will total and average each sire group; then summarize the entire flock (total flock summary), within breed of lamb groups. Additional summaries are computed for each sex, type of birth, and type of rearing.

INDIVIDUAL EWE REPORT — PROGRAM II

When a breeder submits records, he receives the complete annual program output listed above plus a lifetime accumulated record for each ewe in his flock printed out on a separate sheet. This brings each individual ewe record up to date each year. Each succeeding year, the ewe's current production is added to her past performance, retotalled and reaveraged.

The breeder need only tear out the old ewe report sheet and put in the new sheet behind the permanent picture-frame ewe card in the notebook provided for him.

Average Performance

EDP calculates a summation for each column; then, computes an average for each of these columns, taking into consideration the number of entries listed in this column. If data are not available for a certain year, the machine is programmed to only average the available data. If no records are available or the ewe is open for a given year, the program will list it as such.

Additional Analysis

At the bottom of each ewe sheet is a lifetime summary of the ewe. Using the same data, it is rearranged for more complete analysis listing it by sex, type of birth, and type of rearing of lamb.

No Record Ewes

If more than one lamb crop is produced per year, e.g. three lamb crops in two years, and all ewes are not lambing in the same period, it is essential that **all** ewes in the flock, even though they were not exposed for a given lambing period, be indicated on the prelist as currently in the flock. Obviously, those ewes having lambs and the open ewe will appear on the 109 form. However, it is the ewes that do not fall into these two categories but are still in the flock, e.g. for some reason they were not exposed to the ram the last breeding season or they lambed but their lambs cannot be identified, that should be indicated as still in the flock.

This procedure enables us to maintain a complete up-to-date ewe file on your flock.

This ewe will not appear on Program I output, but will appear on Program II having **"NO RECORD"** for that lambing period. She will also appear on the pre-listing. However, her lifetime performance information, e.g. predicted producing value (PPV), etc., will in no way be changed because of having a "NO RECORD" entry.

PREDICTED PRODUCING VALUE (PPV)

PPV is calculated from one or more records on the same ewe to predict the future level of performance. This value is based on the hereditary and permanent environmental factors affecting individual performance. Ewes of different ages and number of records can be compared with respect to their predicted producing ability by using a common base established from a knowledge of how repeatable the consecutive records are for the ewe index ratio.

PPV is calculated from the previous records of performance for each ewe and should be helpful in more accurately identifying the superior performing ewes within the flock.

PRELISTING OF EWES

Each lambing season, after all computed records are returned, two copies of a Prelisting of Ewes will be provided to each flock owner. One copy will list all ewes in the flock in numerical sequence according to ewe ID. The same information is

EWE PRODUCTION RECORD

Single ☐	Twin ☐	Triplet ☐

Birth Date ....
Birth Weight ....
90 Day Crtd. Wt. ....
Adj. Weight .... Ratio ....
Lamb Index .... Ratio ....
Dam's Index .... Ratio ....

Disposal Date and Reason

Sire Code

☐ ....
☐ ....
☐ ....
☐ ....
☐ ....
☐ ....

Ewe No. ....

Reg. No. ....

Breed ....

Sire ....

Dam ....

YEAR	RAM IN SIRE BD/DA ID	RAM ID	-FLEECE-- DAYS WT GRD SL	LAMB ID	BIRTH MO/DA	LAMBS BORN	SEX	BTH WT	TYPE OF REARING	90 DAY CRTD WT	ADJ WT	ADJ WT RATIO	LAMB INDEX	LAMB INDEX RATIO	EWE INDEX	EWE INDEX RATIO	FCF CVR	REMARK CODES
1964	8/ 5	7	214 10.0	0.0 64014	3/ 6	1	E	11.0	1	60.8	64.4	94.1	69.8	90.7	94.8	91.2	0	
1965	8/10	31	204 9.0	0.0 00027	3/ 2	2	E	5.5	2	44.0	54.0	92.6	65.5	97.9	92.0	105.2	0	
				00028	3/ 2	2	R	6.0	2	46.9	56.9	86.7	68.4	94.6			0	
1966	8/ 1	19	212 8.5	0.0 06620	3/ 1	2	R	8.0	1	61.9	67.9	99.0	73.6	99.2	94.4	99.6	0	
				06621	3/ 1	2	E	8.0	8	0.0	0.0	0.0	0.0	0.0			0	5
1967	9/ 9	2	163 8.0	0.0 06722	2/19	1	E	10.0	1	64.7	65.7	101.2	67.3	96.2	89.7	94.9	0	
1968	8/ 1	33	227 8.0	0.0 06849	3/15	2	R	7.0	2	44.7	57.7	98.8	66.3	104.4	93.5	113.3	0	OE
				06850	3/15	2	R	7.0	2	54.4	67.4	116.4	76.0	120.6			0	OE
1969	11/ 1	12	162 6.0	0.0 06945	4/12	1	R	8.0	1	49.5	48.5	83.3	52.1	77.8	66.5	75.3	0	
1970	7/26	82	207 8.0	0.0 00018	2/18	1	E	9.0	1	51.4	56.0	91.7	60.8	88.2	80.0	89.3	0	

TOTAL PERFORMANCE-- 57.5--------------- BORN 10 - RAISED 9   478.3 --

AVE PERFORMANCE 198. 8.2 - 0.0 ------------ 1.4 -- 8.0 1.3 53.2 57.9 95.9 66.7 96.6 87.3 95.6 0.0
PREDICTED PRODUCING VALUE 96.5

SUMMARY BY SEX	TYPE OF BIRTH&REARING		LAMBS BORN	LAMBS RAISED									
RAM	1	1	1	8.0	1	49.5	48.5	83.3	52.1	77.8	66.5	75.3
RAM	2	1	1	8.0	1	61.9	67.9	99.0	73.6	99.2	94.4	99.6
RAM	2	2	3	6.7	3	48.7	60.7	100.5	70.3	106.6	93.0	110.6
EWE	1	1	3	10.0	3	59.0	62.2	95.7	66.0	91.7	88.2	91.8
EWE	2	2	1	5.5	1	44.0	54.0	92.6	65.5	97.9	92.0	105.2

Remarks

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listed in the other copy; however, it is rearranged so that it is listed in sequence according to average accumulated predicted producing value. This copy makes an excellent tool for culling low-producing ewes as well as deciding from which ewes the breeder should be saving replacements.

The breeder should retain the listing by predicted producing value for his permanent files.

The prelisting of ewes by ewe ID is retained until the following year. It should be kept up to date indicating which ewes have been disposed of and why. When submitting the following year's records, the breeder indicates by check mark if the ewe is still in the flock. This is a necessity for participating since all previous production record cards must be stored from one season to another. It will also facilitate an analysis of the major causes of disposal of ewes from the flock.

SUPPLIES PROVIDED

The Ohio Sheep Production Testing Program provides appropriate forms for the breeder to record the information that is needed for the calculations as well as to compile accumulated data. Complete instructions for filling out the forms are supplied at the time a flock is enrolled in the program.

A specially-designed notebook is provided to each breeder at the time of enrollment. It should be used as a permanent file for all production testing records. Additional notebooks may be purchased at cost as the need arises.
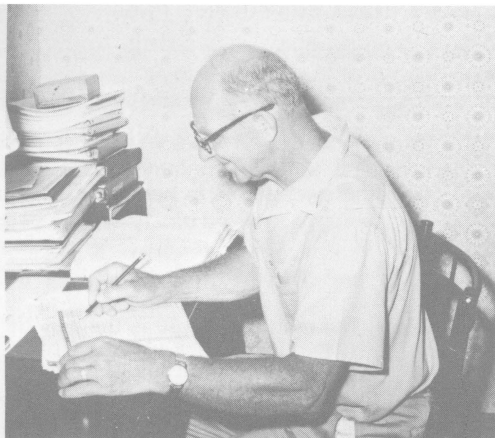
ASSISTANCE

Flock owners are assisted in setting up production testing programs for their flocks by the Extension Specialist in Animal Science, Area and County Extension Agents. It is the responsibility of the flock owner; however, to secure and record the needed information. This program is not a contest and is conducted only for the benefit of the flock owner. Flock owners send their collected information to the Extension Specialist in Animal Science for calculation. This information is kept strictly confidential. When requested, advice will always be available on breeding, management, and selection problems connected with the sheep enterprise.

USE OF THE RECORDS

The records obtained are solely for the use of the individual flock owner in his breeding, selecting and culling program. Any additional use he wishes to make of them will be his own decision. After the records are calculated, they are returned to the co-operator. With this information, the breeder has additional tools

to select replacements and cull undesirable ewes as well as compare sires within his flock.

SUMMARY

The Cooperative Extension Service and the Department of Animal Science of Ohio State University summarize all records and provide summary information on individual ewes, sire groups, all ewe lambs as a group, all ram lambs as a group, and flock averages. Breed averages and an overall state average are all made available to the Sheep Production Testing Cooperators.

APPENDIX

COMPUTATION OF FORMULAS

1. 90-DAY CORRECTED WEIGHT:

(a) Preferred method:

$$\text{Corrected Weight} = \frac{\text{Weaning Weight} - \text{Birth Weight}}{\text{Age at Weaning}} \times 90 + \text{Birth Weight}$$

(b) Alternate method (if birth weight is not recorded):

$$\text{Corrected Weight} = \frac{\text{Weight at Weaning}}{\text{Age at Weaning}} \times 90$$

(A specific symbol ($) is printed behind the corrected 90-day weight when method "b" is used.)

2. ADJUSTED WEIGHT:

$$\text{Adjusted Weight} = \text{Corrected Weight} \times \text{Adjustment Factor}$$

(Note: Adjustment factors found in Table I)

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3. **LAMB INDEX FORMULA:**

(a) For Single Births:

$$\frac{\text{Lamb}}{\text{Index}} = \text{Adjusted Weight} \times (.6 \text{ Dam's Fleece Weight})$$

(Note: $3 \times .5 \times .4 = .6$ where 3 is relative economic value of wool to lamb ($1\# \text{ wool} = 3\# \text{ lamb}$) where .5 is genetic contribution for wool from the ewe; and .4 is heritability estimate of fleece wt.)

(b) For Multiple Births:

$$\frac{\text{Lamb}}{\text{Index}} = \text{Adjusted Weight} \times 1.10 + (.6 \times \text{Dam's Fleece Weight})$$

(Note: The multiple of 1.10 is the genetic creditation for multiple births.)

4. **EWE INDEX FORMULA:**

(a) For ewes giving birth to single and lamb does not survive..............
NO INDEX

(b) For ewes giving birth to singles and raising singles:

$$\frac{\text{Ewe}}{\text{Index}} = \text{Adjusted Weight of Lamb} + (3 \times \text{fleece wt.})$$

(c) For ewes having multiple births and no lambs survive..................
NO INDEX

(d) For ewes having multiple births and raising **one or more:**

$$\frac{\text{Ewe}}{\text{Index}} = \frac{\text{Sum of Adjusted Wt. of Each Lamb} \times 1.17}{\text{No. of lambs raised}} + (3 \times \text{fleece wt.})$$

(Note: The multiple of 1.17 is credited to such ewes as **Genetic value** of multiple births.)

5. **EWE INDEX INVOLVING FOSTERING SITUATIONS:**

(a) True dam's index is calculated as per 4b or 4d **except** that fostered lamb's corrected weight will be adjusted (Table I) based on **foster ewe's age.**

(b) Foster ewe's index if she experienced single birth:

$$\frac{\text{crtd. wt.(s) of lamb(s)}}{\text{No. Lambs}} \times \frac{\text{Table I factor}}{\text{for foster ewe's age}} \times \left(\frac{3 \times \text{foster}}{\text{ewe's fleece wt.}} \right)$$

(c) Foster ewe's index if she experienced multiple births:

$$\frac{\text{crtd. wt.(s) of lamb(s)}}{\text{No. Lambs}} \times \frac{\text{Table I factor for}}{\text{foster ewe's age} \times 1.17} \times \left(\frac{3 \times \text{foster}}{\text{ewe's fleece wt.}} \right)$$

NOTE: Foster lamb's data are not listed with fostering ewe's record but are listed with true dam's record. An asterick (*) is printed by code of rearing of true dam's record for lamb's fostered by another ewe in the sire summary. The fostering ewe receives an asterick by the record year for each foster lamb that she raises.

6. ADUSTED WEIGHT RATIO:

The adjusted weight ratio is computed on the basis of each sex group (R & W grouped together) removing the individual animal being computed from the average (n – 1). This same procedure is used for computing the lamb index ratio.

7. EXAMPLE USE OF ABOVE DATA:

Model: A 2-year-old ewe sheared 10# wool and weaned a pair of twin lambs: An 82# ram lamb with birth weight of 10.0# and a 74# ewe lamb with birth weight of 8.0#. Lambs were 96 days of age at weaning.

(a) 90-Day Corrected Weight:

$$RAM\ldots\ldots\ldots\frac{82-10}{96} \times 90 + 10 = 77.5\#$$

$$EWE\ldots\ldots\ldots\frac{74-8}{96} \times 90 + 8 = 69.9\#$$

(b) Adjusted Weight:
RAM.........77.5 × 1.09 (from Table I) = 84.5#
EWE.........69.9 × 1.20 (from Table I) = 83.9#

(c) Lamb Index:
RAM.........84.5 (1.10) + (.6 × 10.0) = 99.0
EWE.........83.9 (1.10) + (.6 × 10.0) = 98.3
(Note: The multiple of 1.10 is the genetic creditation for multiple births.)

(d) Ewe Index:
$$\frac{(84.5 + 83.9 \times 1.17)}{2} + (3 \times 10.0)$$
$$98.0 + 30 = 128.5$$

(e) Example of Ewe Index Ratio:
85 ewes in this flock had an average of 118.6

$$\frac{(85 \times 118.6) - 128.5}{84}$$

$$\frac{10081 - 128.5}{84} = 118.5 \text{ average index of the other 84 ewes.}$$

$$\frac{128.5}{118.5} \times 100 = 108.4 \text{ index ratio of example ewe.}$$

8. PREDICTED PRODUCING VALUE (PPV):

PPV is calculated from one or more records on the same ewe to predict the future level of performance. This value is based on the hereditary and permanent environmental factors affecting individual performance and is especially valuable for comparing ewes of different ages and numbers of performance records.

PPV is calculated from the previous records of performance for each ewe and provides a common base for accurately identifying the superior performing ewes within the flock.

Procedure of computing the PPV is as follows where r = repeatability of a single record (.35), R = repeatability for multiple records and n = number of records:

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Example:
EWE A has an index ratio of 114 (single record)
EWE B has four index ratios of 110 (four records)
$$103$$
$$107$$
$$112$$
(1) PPV for Ewe A = Flock Average + r (Ewe A average – Flock average)
$$= 100 + .35 (114 - 100)$$
$$= 104.9$$
(2) PPV for Ewe B = Flock Average + R (Ewe B average – Flock average)
$$= 100 + .68 (108 - 100)$$
$$= 105.4$$

NOTE:

$$R = \frac{n\,r}{1 + (n-1)\,r} \qquad R = \frac{4\,(.35)}{1 + (4-1)\,.35} \qquad R = .68 \text{ where there are 4 records.}$$

SPECIAL CODED SYMBOLS * ' $

1. FOSTERING SITUATIONS:

A. An asterick (*) is printed by code of rearing of true dam's record for lamb fostered by another ewe in the sire summary (Program I).

B. The fostering ewe receives an asterick (*) by the record year for each foster lamb that she raises (Program II).

2. NO BIRTH WEIGHT:

The dollar sign symbol ($) is printed behind the corrected 90-day weight when the corrected 90-day weight is computed without birth weights.

3. NO FLEECE WEIGHT:

A. A prime sign (') is printed behind the ewe index that is computed without the fleece weight.

B. A prime sign (') is printed behind the lamb index that is computed without the fleece weight of the dam.

INQUIRY

Direct all inquiries in relation to the Production Testing of Sheep in Ohio to your County Extension Agent, Area Livestock Agent, or:

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Extension Specialist
Animal Science
2029 Fyffe Road

The Ohio State University
Columbus, Ohio 43210
Telephone: 422-6791