Inland Revenue
Te Tari Taake

IP3151 Valuation Of Ostriches and Emus For Income Tax Purposes

Date of Ruling: 1996.

Ostriches and emus are livestock within definition of "non-specified livestock" — Value of non-specified livestock at option of taxpayer — Options either market price, replacement price, standard value or cost price— Income Tax Act 1994, ss EL 9(1), OB 1.

Inland Revenue intends to draft and issue a public binding ruling or an interpretation statement on the valuation of ostriches and emus for income tax purposes.

Ostriches and emus are livestock and come within the definition of "Non-specified livestock" in section OB 1 of the *Income Tax Act* 1994 ("the Act"). Section EL 9(1) of the Act provides that the value of any non-specified livestock to be taken into account at the end of the income year, shall be at the option of the taxpayer:

- Its cost price; or
- Its market price; or
- The price at which it can be replaced; or
- With the concurrence of the Commissioner, its standard value.

Summary of discussion document

The attached document discusses each of the four valuation options.

Market price, replacement price, and standard values are straightforward and are discussed briefly.

The document focuses on the cost price valuation option and contains a proposed method for valuing ostriches and emus on hand at the end of the income year.

The process of arriving at a cost price for ostriches and emus is similar to the self-assessed cost method used by farmers of specified livestock, e.g. sheep, cattle, and deer. However, modifications are made to this method because of the unique nature of farming birds.

The system is designed to use figures that farmers or their accountants would normally arrive at in the preparation of farm accounts. Some additional work will be required in the initial stages to determine the apportionment of some costs between ostrich, emu, and other enterprises on the property. Once these figures have been established they will probably remain constant from year to year, unless there are shifts in the overall mix of activities on the farm.

We suggest that for an overview of the method, readers should turn to the summary on page 5 and compare this with the example on page 8 which shows how the cost price is established in practice.

The information and draft method contained in this report were prepared in consultation with John King, Senior Analyst (Primary Sector), MAF Policy, Rural Resources Unit, MAF.

INVENTORY VALUATION OPTIONS AND METHODS FOR OSTRICHES AND EMUS

1.0 Ostrich industry

The ostrich industry has emerged as a commercial industry in the 1994–1996 period in New Zealand. Breeding stock have been imported at high cost, and farms have been set up in a number of locations including Waikato, Hawke's Bay and Canterbury. The imported costs of mature birds have exceeded $60,000 per head, with lower costs for immature birds and fertilised eggs. The NZ Ostrich Association estimated that at 31 March 1996 there were 2,700 live birds in the country.

The breeding life of birds (bred in pairs or trios which include one male) ranges up to forty years. They breed prolifically, with an annual potential of 60 or more live chicks reared from artificially incubated eggs. These

factors suggest that industry expansion in terms of bird numbers is likely to be very rapid (compared with the deer industry for example).

2.0 Emu industry

The emu industry is also an emerging commercial industry in New Zealand, having commenced about two years earlier than ostrich enterprises. It started on a much smaller scale and at lower cost than ostriches. Emus have long breeding lives (20 years plus), and also require a high ratio of male to female birds (40%–60%). Eggs are artificially incubated, and annual live chick production ranges up to 20 per year.

While being an overall lower valued industry (in terms of current bird and product values), the emu and ostrich industries are sufficiently similar to be grouped together for the purpose of valuing the birds at the end of the income year.

3.0 Valuation options

Ostriches and emus are livestock and come within the definition of "non-specified livestock" in section OB 1 of the *Income Tax Act* 1994 ("the Act"). Section EL 9(1) of the Act provides that the value of any non-specified livestock to be taken into account at the end of the income year, shall be at the option of the taxpayer:

- Its cost price; or
- Its market price; or
- The price at which it can be replaced; or
- With the concurrence of the Commissioner, its standard value.

3.1 Standard value

The Commissioner has not approved a standard value for ostriches or emus. In recognition of the emerging nature of these industries, and the probable reduction in values over the medium term (4–5 years), it is unwise to approve a standard value at this stage because this value would need to be constantly changed.

3.2 Market value and replacement price

The valuation options of market value and replacement price are sufficiently similar in nature to be discussed together. It appears that either option will be suitable for ostrich and emu valuation, and is likely to be the preferred option for those purchasing high valued breeding stock which are likely to reduce in value over time (as a result of both bird ageing and industry expansion). As values decrease over time, the use of the market value or replacement price option will allow the decreasing value of birds on hand to be treated as a tax deduction. Off-farm investors are one specific group of potential bird owners who are likely to adopt the market value option for breeding birds.

3.3 Cost (of production)

The cost (of production) option is an alternative which is likely to be preferred by those breeding their own young birds for either breeder replacement or sale purposes, and for those in the business of purchasing immature stock for growing on to maturity. In both instances, the cost of breeding and rearing, or cost of purchase is likely to be lower than the market value of those growing birds at the end of an income year (at least in the foreseeable future). The use of the cost option will usually overcome the problem of taxing unearned income if valuation was based on market values at the end of an income year for homebred birds.

4.0 Inventory groupings

Birds generally reach physical maturity (and slaughter age) by the end of their second year. Therefore, it is proposed that there be two main inventory groupings for birds on hand at balance date in any financial year (similar to that for most specified livestock).

Bird age at balance date	*Inventory groupings*
Zero to one year	Rising one year
Opening rising one year, plus all birds purchased which at the end of that income year would be over one year of age	Rising two year and older birds (mature birds)

In addition, a separate inventory group will be required for fertilised eggs which were purchased or imported and are on hand at balance date.

4.1 Departure from inventory groupings

The high valued nature of these industries in the short term is causing virtually all birds (particularly breeding stock) to be individually numbered and catalogued. Under such circumstances, the individual cost or market value of each bird can be easily recorded and is likely to be recorded for insurance and stud purposes. This would create an inventory group separate from the normal mainstream inventory grouping of (usually homebred) birds valued under the FIFO (first in first out) or Average Inventory System (which also applies to specified livestock).

It is suggested that all birds in any inventory age grouping should be valued using the same valuation option. Therefore, birds can only be valued at specific cost if the rest of the birds in that inventory (age) grouping are also valued at cost.

It is noted that because of the longevity of the birds (particularly ostriches), the rate of replacement will be very low on farms with stable breeding numbers (maybe less then 5% p.a.). Therefore, the change in the two year and over mature inventory group will be small on a year to year basis and owners may wish to individually record the cost/value of all breeding birds separately in preference to FIFO or average inventory systems.

5.0 End of year valuation of eggs

A unique factor of these industries is that there are going to be artificially incubated eggs on hand at the end of an income year. The problem arises as to how these eggs should be valued. The specified livestock valuation regime does not separately value a foetus, except in as much as the value of Herd Scheme livestock struck on 30 April each year reflects the state of pregnancy and hence value of livestock with foetus at that date.

"Trading stock" is defined in section OB 1 as including "anything produced or manufactured". We suggest that eggs are "anything produced" and therefore are trading stock. The question arises as to how eggs should be valued for tax and accounting purposes.

Section EE 1(3) provides that the value of the trading stock of any taxpayer to be taken into account at the end of any income year shall be, at the option of the taxpayer its cost price, its market price or the price at which it can be replaced.

There is some doubt about how eggs should be valued and whether eggs bred by the owner have a cost price (given that the costs of incubation will not be accrued against the end of year value of the egg, but instead will accrue to the live chicks reared in that year).

However, where an egg is purchased or imported, the purchase price or costs of importation (which the taxpayer will have claimed a deduction for) represent the cost of the egg. To accurately measure a taxpayer's assessable income the expenditure incurred on purchasing or importing the egg must be matched against the income arising from that expenditure, i.e. the egg. The value of the egg will simply offset the deduction received for the purchase or importation of the egg.

Therefore, as a practical solution it is suggested that fertilised eggs be valued as follows:

- Eggs bred by the owner and on hand at balance date should be valued using either cost, market price, or replacement price. The Commissioner suggests that where eggs are bred by the owner the "cost price" of the eggs is nil.
- Eggs purchased or imported which have not hatched at balance date should be valued under either cost, market value, or replacement price.

Purchased or imported eggs will be valued per egg on hand (at the discretion of the taxpayer) at either the average cost of eggs purchased in the six weeks prior to balance date (the normal egg incubation period for an ostrich or emu), or at market value or replacement cost. If the cost option is used, the costs of incubation will not be accrued against the end of year value of the egg. Instead they will accrue to the live chicks reared in that year.

6.0 Suggested guidelines for using cost (of production as a valuation option

This section outlines a proposed method for a (self-assessed) cost valuation for ostriches and emus on hand at the end of an income year. The system is based on the self-assessed cost method for specified livestock detailed in the Appendix to Inland Revenue's *Tax Information Bulletin*, Volume Four, No. 7, (March 1993). Certain departures from this method occur due to the unique nature of farming birds, and these are fully documented in the appropriate sections.

The cost of production option discussed in this paper covers both ostriches and emus. Where both types of bird are farmed on the same property, the two types should be treated as separate enterprises and the costs allocated between them on the best possible (fair and reasonable) basis. The process of costing described in the following pages should not pose any problems where there are two types of birds being farmed.

6.1 Summary of cost of production guidelines

This subsection provides a summary of the proposed self-assessed cost system for valuing ostriches and emus. The summary is followed by an example showing the calculation of the cost of production for an ostrich enterprise.

It is emphasised that these are guidelines only. Taxpayers can deviate from the guidelines if they have sufficient detail/data to improve the costing estimates. All costs involved are GST exclusive.

Note that each step is discussed in more detail at pages 16 to 24.

Steps one to three identify the direct costs relating to the production of ostriches and emus ("bird enterprise costs" or "BEC"). Bird enterprise costs which relate specifically to the rising one year inventory group are assigned to that group. Bird enterprise costs which relate specifically to the rising two year and older inventory group are assigned to that group.

Step one: List all deductible costs incurred in the running of the farm.

Step two: Identify the direct costs relating to the ostriches and emus (the bird enterprise costs) including purchase costs of birds and eggs which have hatched at balance date.

Step three: Assign the bird enterprise costs (in step two) to the rising one or rising two year inventory groups.

Step four identifies the bird enterprise costs which have not been assigned to the rising one or rising two year inventory group, or to any other farm enterprise ("the remaining bird enterprise costs"). Steps five, six, and seven apportion the remaining bird enterprise costs between the bird enterprise and any other farm enterprise being carried on and between the rising one and rising two year inventory groups.

Step four: Identify the bird enterprise costs which have not been assigned to the rising one or rising two year inventory groups or to any other farm enterprise.

Step five: Calculate the total area used in producing ostriches and emus, and convert this to a proportion of the total farm holding.

Step six: Apportion the remaining bird enterprise costs based on the proportional area calculation in step five above or any other fair and reasonable basis, including invoice documentation, a payment recording system, or best estimate.

Step seven: Apportion the remaining bird enterprise costs from step six between the rising one year, and rising two year and older groupings on the basis of the area used by each inventory group as follows:

- To the rising one year group, the percentage of the total ostrich or emu area used by the breeding stock, their offspring, and purchased birds which would be valued as rising one year of age if they were still on hand at the end of the income year.
- To the rising two year and older group, the percentage of the total ostrich or emu area used by the birds which were classified as rising one year stock, together with all birds which were purchased and which would be valued as rising two years or older if they were still on hand at the end of the income year.

Steps eight and nine describe how to use the costs calculated above to value the ostriches and emus at the end of the income year.

Step eight: Calculate the average cost per head.

The average cost per head is calculated by dividing the remaining bird enterprise costs plus costs of bird (and egg) purchases allocated to each inventory grouping (plus the opening inventory value in the case of rising two year and older group) by the total number of birds in each grouping passing through the enterprise in that year calculated as:

- For the rising one year group, the closing number of birds on hand in that group plus all sales of birds which would have been valued as rising one year of age if still on hand at the end of the income year, plus 5% of the number of fertilised eggs sold during the income year.

  (Note: A small proportion of overall costs must be assigned to eggs which have been laid and sold during the income year. The figure of 5% is simply an estimate to reflect the costs of these eggs.)
- For the rising two year and older group, the number of rising one year birds on hand at the end of the preceding income year plus all purchases of birds which would be valued in the rising two year and older class if still on hand at the end of an income year.

Step nine: The average costs will be applied to the new intake of birds, in each inventory grouping, which are on hand at the end of the income year.

The average costs of all eggs purchased or imported during the income year will be applied to those eggs which have not hatched at balance date.

Step ten discusses the use of an inventory system for the rising two year and older group.

Step ten: For the rising two year and older grouping, an inventory system for multi-aged bird groups will be required unless individual recording and tracing is undertaken. This may be accomplished using the FIFO or Average Cost Inventory System currently used for specified livestock.

Example of ostrich costing

Calculation of average cost

This example sets out how to calculate the cost of production for an ostrich enterprise.

This analysis is for example purposes only, and does not reflect the financial viability of the current or future ostrich industry, or the actual valuation at cost of birds in any real enterprise.

Table one provides the necessary physical information about the farm. It considers a small farm of 60 hectares, of which only 9 hectares are used for ostrich farming. The ostrich enterprise is increasing numbers over the year as well as selling both young and older stock. Eggs are also purchased and sold.

Table two calculates the bird enterprise costs (other than bird and egg purchases) for each inventory grouping. The costs incurred in running the farm are identified. The bird enterprise costs are identified and assigned to the bird inventory groups and other farm enterprises. The remaining bird enterprise costs are shared on either an area related basis or a fair and reasonable estimate.

In this example, the allocation between the bird enterprise and the rest of the farm is mainly made on an area basis (of 15% or 0.15 allocated to the birds), but a fair and reasonable basis has been used in the case of the 'Animal Health General' category. (However, we note that taxpayers may be able to identify actual costs.)

Table three summarises the calculation of average costs per head. The average cost per head for the rising one year group is $3,504. The average cost per head for the rising two year and older group is $19,317. In the case of the rising two and older group, the large difference in value (from the rising one year olds) occurs because of the much higher opening value of rising one year olds ($12,000 per head), and the purchase of rising two year and older birds at an average cost of $40,000 per head.

The inventory systems applying to birds on hand of the income year are discussed on pages 600,511 to 600,513.

Table one — ostrich and emu cost of production model for income tax purposes

Farming policy

Part of a larger farm breeding own replacements, selling some chicks at 4 months, and rearing the rest for sale at 18 months or breeding number increases. This operation is in its second year after initial purchase of the birds.

Farm area	**Hectares**	**% of area**
Total area of farm	60	
Area running breeding ostriches and rising one year chicks	6	10%
Area running rising two year and older non-breeding birds	3	5%

Ostrich purchases, sales, and natrual increase

Ostrich numbers at start of year (opening)	**Number**	**Av. value per head $**	**Total opening value $**
Breeding ostriches (both sexes) (Hens @ $60,000 opening value) (Cocks @ $50,000 opening value)	16	55,000	880,000
Rising one year ostriches (Av. cost from last year $12,000)	30	12,000	360,000
Total number and value (cost) of live birds at start of year	46		1,240,000
Purchased eggs in incubation (opening)	5	3,000	15,000

Ostrich purchases, sales, and natrual increase

Transaction	**Number**	**Cost per head**	**Total cost**
Natural increase (incl. purchased eggs which hatched during year)	100	N/A	
Purchases:		$	$
Eggs	10	3,000	30,000
Rising one year birds	10	10,000	100,000
Rising two year and older birds	10	40,000	400,000
Sales:			
Rising one year birds hatched in this income year	60	N/A	
Opening 1–2 yr and mature birds	24	N/A	(include 4 hens)
Eggs bred on farm	20	N/A	
Ostrich numbers at end of year (closing)			
R 2yr ostriches (both sexes)	22	N/A	
Rising one year Ostriches	40	N/A	
Total closing birds on hand	62		
Purchased eggs in incubation	5	N/A	
Other livestock farmed (Start of year opening stock)	**Number**		
Sheep	400		
Beef cattle	25		

Table two — Farm Expenditure Account 1996 — Bird Enterprise Cost (BEC) calculation for ostriches

Expenditure item	*Farm cost*	*BEC y/n?*	*Specific cost allocations*		*Allocated to other activities*	*Remaining BEC*	*Area based other enterprise multiplier*	*Age group multipliers*		*Total BEC to R1 year ostrich*	*Total BEC to R 2 year ostrich*
	$		R.1 year $	R.2 year $	$	$	0.15	R1 Yr	R2 Yr	$	$
FEED:—											
Breeding chicks	2,750	y	2,750			0	1	0.667	0.333	2,750	0
Chicks	1,400	y	1,400			0	1	0.667	0.333	1,400	0
1–2 year birds	1,800	y		1,800		0	1	0.667	0.333	0	1,800
Other farm feed general	500	y			500	0	0.15	0.667	0.333	0	0
Vet. for birds	3,000	y	2,800	200		0	1	0.667	0.333	2,800	200
Animal health general	5,000	y			1,000	4,000	0.75	0.667	0.333	2,000	1,000
Electricity incubation	4,000	y	4,000			0	1	0.667	0.333	4,000	0
Electricity general	1,200	y				1,200	0.15	0.667	0.333	120	60
Freight out	1,500	n				0	1	0.667	0.333	0	0
Freight in	230	y	150			80	0.15	0.667	0.333	158	4
Fertiliser & seeds	2,600	y				2,600	0.15	0.667	0.333	260	130
Vehicle expenses	1,400	y				1,400	0.15	0.667	0.333	140	70
R & M:											
Water supply	350	y				350	0.15	0.667	0.333	35	18
Bird buildings	1,100	y	1,000	100		0	1	0.667	0.333	1,000	100
BEC related general	1,400	y				1,400	0.15	0.667	0.333	140	70
R&M											
Weed & pest control	650	y				650	0.15	0.667	0.333	65	33
New fences for birds	2,600	y				2,600	1	0.667	0.333	1,733	867
Depreciation: bird facil.	860	y	700	160		0	1	0.667	0.333	700	160
Other BEC related deprc.	450	y				450	0.15	0.667	0.333	45	23
Wages paid	24,500	y				24,500	1	0.667	0.333	16,333	8,167
Interest & rent	39,500	n				0	1	0.667	0.333	0	0
Acct/admin/mail/rates	3,750	n				0	1	0.667	0.333	0	0
Shearing	1,250	n				0	1	0.667	0.333	0	0
Sheep & cattle purchases	4,000	n				0	1	0.667	0.333	0	0
TOTAL COSTS	**105,790**		**12,800**	**2,260**	**1,500**	**39,230**				**33,680**	**12,700**

Table three — calculation of average cost per head for a year's intake of ostriches

Rising one year average cost per head

Average cost/head = (BEC + specific costs allocated + rising one year purchase cost + egg purchase cost during year + opening value of eggs on hand)

divided by

(Closing number of rising one year birds on hand + birds purchased which would be in the rising one year group if on hand at the end of this income year + 5% of fertilised eggs sold.)

Thus: average cost of rising one year birds

= ($33,680 (made up of $12,800 + $20,880) + $100,000 + $30,000 + $15,000) **divided by** (40 + 10 + (5% of 20 eggs sold))

= $3,504 per head

Rising two year and older average cost per head

Average cost/head = (BEC + specific costs allocated + rising two year and older purchase cost + opening value of rising one year birds on hand.)

divided by

(Opening number of rising one year birds on hand + birds purchased which would be in the rising two year group if on hand at the end of this income year.)

Thus: average cost of rising two year & older birds

=	($12,700 (made up of $2,260 + $10,440) + $400,000 + $360,000) **divided by** (30 + 10)
=	$19,317 per head

Any purchased or imported eggs on hand will be valued at the average purchase costs of eggs during the six weeks prior to balance date.

End of year inventory valuation **(all relevant data in table one)**

The end of year valuation of birds on hand will use the average costs calculated for each year. In the case of rising one year birds the inventory value would change as follows:

Opening value (cost):	
30 rising 1 year birds @ $12,000/hd	$360,000
Closing value (cost):	
40 rising 1 year birds @ $3,504/hd	$140,160
Change in assessable value of birds on hand	($219,840) (deduction)

This results in a reduction (tax deductible) of the value of rising one year birds on hand at the end of the income year of approximately $220,000, despite an increase in numbers of 33%. This arises as a result of much lower homebreeding costs compared to initial purchase costs in the previous year.

The rising two year and older valuation also changes significantly. On the basis that four of the breeding ostriches are sold, and an increase in total numbers over the year from 16 to 22 occurs, the following inventory adjustments could occur:

(a) *Individual tracing*

On the basis that the four birds sold were all hens, their sale would reduce the book value by $240,000, and their replacement and increase (numbering ten) which were purchased at $40,000 per head would increase the value of birds on hand by $400,000. In summary form:

Total opening value (cost)	$880,000
Less four sold/dead @ $60,000	–$240,000
	$640,000
Plus intake of 10 this year @ $40,000	+$400,000
Total closing value (cost)	$1,040,000
Assessable change in value	+$160,000

(b) *FIFO inventory*

Using an FIFO inventory system, the outgoing birds would be valued at their average opening value of $55,000. The intake for the year (ten in number) would come in at their average cost for the year of $19,317. In summary:

Total opening value (cost)	$880,000	
Less four sold at FIFO value (cost) $55,000	–$220,000	
	$660,000	
Plus intake of 10 this year @ $19,317	$193,170	
Total closing value (cost)	$853,170	
Assessable change in value	($26,830)	(deduction)

Under the FIFO system, the sale of mature birds in subsequent years would continue to reduce book values by the average $55,000 per head until all original 16 birds are disposed of. The next sales would be accounted for at $19,317 until they are also disposed of, after which the next oldest cost would apply.

(c) *Average inventory system*

Using an average inventory system, the four sold would go out of the books at last year's average value (cost) of $55,000. The incoming ten would enter at their average value for the year ($19,317), and a new average for the 22 birds of rising two years and older ($38,780 per head). In the following income year, mature birds disposed of would exit the accounts at the average value of $38,780, and a new average per head calculated for the end of the year. The average inventory system is summarised below:

Total opening value (cost)	$880,000	
Less four sold at average value (cost) $55,000	–$220,000	
	$660,000	
Plus intake of 10 this year @ $19,317	$193,170	
Total closing value (cost)	$853,170	
Assessable change in value	($26,830)	(deduction)
New average value per head	$38,780	

It is noted that this change in book value is the same as under the FIFO system. However, in subsequent income years it will not be, as the FIFO system will reduce book value at the rate of $55,000 per bird sold (until all of the original 16 are disposed of), and the average inventory system will reduce next year's breeding bird sales by the average opening cost of $38,780 (and probably lower average values in subsequent income years).

(d) *Choice of inventory system*

As seen, the choice of inventory system may have significant income tax implications. The inventory system can be changed without notice, but it is essential, if the 'cost of production'

valuation option is to be adopted, that advice is taken at the outset of developing an ostrich or emu enterprise.

7.0 Detailed guidelines for using cost (of production) as a valuation option

7.1 Bird enterprise costs and specific assignment

7.1.1 Bird enterprise costs

Step one: List all deductible costs incurred in the running of the farm.

Step two: Identify the direct costs relating to the ostriches and emus (the bird enterprise costs), including purchase costs of birds and eggs which have hatched at balance date.

Defining the costs to be included in the costing of birds on hand at the end of an income year is important. Taxpayers can include all deductible costs incurred at their discretion, but may exclude certain categories of cost which relate to the running of the business or enterprises other than (in this case) the production of ostriches or emus.

Bird enterprise costs calculated by excluding the expenses below can be classified as direct production costs, since they do not include the overhead costs of operating a farm business. This net cost represents the minimum costs which must be accounted for in determining the cost of production of ostriches or emus.

The following costs may be excluded from the total deductible farm costs in any income year to determine the bird enterprise costs relating to the ostriches and emus:

- All direct costs relating to any enterprise other than ostrich and emu production where these costs can be identified (or estimates made on a fair and reasonable basis).
- All costs of harvesting any products in any way, e.g. feathers from ostriches as these are not associated with producing and growing immature birds.
- Repairs, maintenance, and depreciation of all farm buildings except those specifically used by the ostrich or emu enterprises (which would include ostrich and emu related paddock sheds, quarantine facilities, and hatcheries).
- Repairs, maintenance, and depreciation on plant and equipment used in producing secondary (dual) livestock products or non-livestock enterprises, e.g. cropping.
- All outward freight from the farm, and all inward freight of livestock other than ostriches or emus, or inward freight relating to non-livestock enterprises.
- Deductible share of car expenses.
- Accounting and legal fees, consultancy fees, rates, and general farm (non-livestock) insurance.
- Interest, rent, and bailment fees. Note that the cost of leasing livestock, including ostriches and emus, but not the bailment of livestock, is included in bird enterprise costs.
- All livestock purchase costs including ostriches and emus and eggs are treated separately within the cost of production formulae.
- Imputed costs of labour or livestock depreciation (the latter being specifically disallowed as a cost for ostriches and emus).
- The livestock owner may apportion the cost of wages, salary, or management fees paid (which are tax deductible) over all enterprises/activities in the farming operation on a fair and reasonable basis. This applies regardless of whether the payment was made to an individual, a partner, a shareholder-employee, or anyone else. These expenses could be apportioned on the following activities:

    — Activities excluded from bird enterprise costs, such as accounting and administration.
    — Other farm enterprises, such as forestry and cropping.
    — Specified livestock production.
    — Non-specified livestock production, e.g. ostriches or emus.

In some instances payment for services may be made at the outset of a contract for a period spanning more than one year, e.g. a three-year management contract to manage birds for an investor. In such cases the cost must be annualised for the purposes of calculating the cost of production for end of year valuation purposes.

7.1.2 Specific assignment of bird enterprise costs

Step three: Assign the bird enterprise costs (in step two) to the rising one year or rising two year inventory groups.

Under step two the total deductible farm costs have been reduced by the allowable exclusions in order to determine the bird enterprise costs relating to the ostriches and emus.

The next step in the costing process is to assign those costs which specifically relate to a bird type or inventory age grouping. Specific cost allocations between age groups are suggested below. Allocations on the basis of a fair and reasonable estimate will be allowed.

(a) Rising one year grouping:

- Repairs and maintenance and depreciation on paddock buildings, incubators and hatcheries, and any other buildings or plant and equipment specifically used in the production of rising one year birds.
- Specific costs of incubation and early rearing facilities (or contracts to outside organisations for these activities).
- Inward freight of eggs and live birds which would be valued (if on hand) at the end of the income year in the rising one year grouping.
- All identifiable costs associated with breeding birds including vet and bird health, and all feedstuffs (including freight) other than that fed to non-breeding rising two year olds and older.
- Fencing associated with breeding areas.

(b) Rising two year and older grouping:

- Inward freight of live birds classified in this group.
- Any direct costs including feedstuffs (plus freight), and vet and animal health costs identifiable as being incurred by this group or which are the residual of total costs after allocation to the rising one year bird group — not including elements of costs which belong to other enterprises on the farm.
- Bird fencing not associated with (a) above.

7.2 Allocation of remaining bird enterprise costs between enterprises

So far we have:

Total farm tax deductible costs — **minus**

Exclusions from costs = bird enterprise costs (paragraph 7.1.1) — **minus**

Costs specifically assigned (paragraph 7.1.2) — **equals**

Remaining bird enterprise costs.

Step four: Identify the bird enterprise costs not yet assigned to the rising one or rising two year inventory groups or to any other farm enterprise.

The remaining bird enterprise costs are now to be divided between the bird enterprises and other enterprises on the farm, e.g. sheep and cattle. The remaining bird enterprise costs will be allocated between enterprises on either a fair and reasonable basis and/or an area related basis. The area related approach assumes that the remaining bird enterprise costs are averaged over the total farm area.

In respect of the allocation between enterprises, only certain cost categories will be involved. Such costs will include non-specific animal health, fertiliser, wages paid, and repairs and maintenance of a general nature, e.g. fences and water supply, which are shared with other livestock enterprises.

Step five: Calculate the total area involved in producing ostriches and emus, and convert this to a proportion of the total farm holding.

Step six: Apportion the remaining bird enterprise costs based on the proportional area calculation in step five above or on any other fair and reasonable basis including invoice documentation, a payment recording system, or best estimate.

$$\text{Allocation to birds} = \text{BEC} \times \frac{a}{d}$$

Where

BEC = remaining BEC.
a = the area of the bird enterprise.
d = total farm area.

This calculation determines the share of remaining bird enterprise costs which should be allocated to the bird enterprise.

7.3 Allocation of remaining bird enterprise costs between inventory groupings

Step seven: Apportion the remaining bird enterprise costs from step six between the rising one year, and rising two year and older groupings.

The remaining bird enterprise costs allocated to the bird enterprise are then shared between the inventory age groupings, also on an area basis which reflects the grazing demand of the age groupings and breeding stock.

The bird related remaining bird enterprise costs will usually be allocated on an area related basis as follows:

(a) Allocation to the rising one year group:

$$\text{Amount allocated} = \text{BEC} \times \frac{b}{a}$$

Where

BEC = remaining bird enterprise costs relating to the bird enterprise.
b = the ostrich or emu area used by the breeding stock, their offspring, and purchased birds which would be valued as rising one year of age if they were still on hand at the end of the income year.
a = the area of the bird enterprise.

(b) Allocation to the rising two year and older group:

$$\text{Amount allocated} = \text{BEC} \times \frac{c}{a}$$

Where

BEC = remaining bird enterprise costs relating to the bird enterprise.
c = the ostrich or emu area used by the birds which were classified as rising one year stock at the end of the preceding income year, together with all birds which were purchased and which would be valued as rising two years or older if they were still on hand at the end of the income year.
a = the area of the bird enterprise.

Note that where ostriches and emus are being run on the same farm, this calculation would be based on four inventory groupings, two inventories for each bird type.

7.4 Dual product multipliers

Dual product multipliers are used in preparing costs of production for specified livestock. These multipliers remove a portion of the bird enterprise costs allocated to a livestock group to account for the cost of producing secondary or dual products. For example, the dual product multiplier for sheep is 0.8, thus removing 20% of the costs associated with wool production rather than growing livestock.

It is not proposed to include a dual product multiplier for ostriches or emus. The dual product is feathers which generally are harvested at slaughter. Even if harvested on an annual basis from the breeding stock, the weight of feathers is small compared with the weight of growing multiple offspring, and the costs of humane plucking is likely to outweigh the value of the feathers (at 1996 prices).

7.5 Average cost per head calculation

Step eight: Calculate the average cost per head.

Using the data calculated in subsections 7.1 to 7.4, the final step is to calculate the average cost per head of the rising one and two year groupings for the income year. The average cost per head is calculated by dividing the bird enterprise costs plus costs of bird (and egg) purchases allocated to each inventory grouping (plus the opening inventory value in the case of rising two year and older group) by the total number of birds in each grouping passing through the enterprise in that year. A separate calculation is made for each age grouping.

(a) *Rising one year age group*

Average cost is calculated by dividing all costs including purchase cost allocated to this group by the number of rising one year stock which passed through the enterprise during the year, plus an allowance for eggs sold to which a portion of the cost of production is assigned.

This is represented by the following formula:

$$\text{Average cost / head} = \frac{\text{BEC} + \text{f} + \text{g} + \text{w} + \text{y}}{\text{h} + \text{j} + \text{k}}$$

Where

BEC = the share of the remaining bird enterprise costs allocated to the rising one year group as calculated in paragraph 7.3.
f = specific costs allocated to this group (paragraph 7.1.2).
g = the total purchase costs of birds purchased where the birds would be valued in the rising one year group if still on hand at the end of the income year.
w = total closing cost of fertilised eggs on hand (if any) at the end of the preceding income year.
y = total cost of eggs purchased during the year which have hatched by the end of the income year.
h = the closing number of rising one year birds on hand at the end of the income year.
j = the total number of birds purchased which would be valued in the rising one year group if still on hand at the end of the income year.
k = 5% of the number of fertilised eggs sold during income year.

(b) *Rising two years and older group*

This average cost increases the average valuation of rising one year birds on hand at the end of the previous income year by the average costs allocated to the rising two year and older age

grouping (including purchase costs) during the income year. This is achieved through the following formula:

$$\text{Average cost / head} = \frac{\text{BEC} + \text{m} + \text{n} + \text{o}}{\text{p} + \text{q}}$$

Where

BEC = the share of the remaining bird enterprise costs allocated to the rising one year group as calculated in paragraph 7.3.
m = total closing value (cost) of the rising one year birds on hand at the end of the preceding income year.
n = specific costs allocated to this group (paragraph 7.1.2).
o = the total purchase costs of birds purchased which would be valued in the rising two year and older group if still on hand at the end of the income year.
p = the closing number of rising one year birds on hand at the end of the preceding income year.
q = the total number of birds purchased which would be valued in the rising two year and older group if still on hand at the end of the income year.

The average cost for each inventory group so calculated is applied to the new intake of birds on hand at the end of the income year.

If all birds in either inventory group are purchased during the year, i.e. none homebred or on hand as rising one year birds at opening, these are simply valued at their average purchase cost with no requirement to make the calculations as above. This will usually only occur in the start-up year.

7.6 Application of average cost per head to end of year numbers on hand

Step nine: The average costs will be applied to the new intake of birds, in each inventory grouping, on hand at the end of the income year.

The average cost per head for the rising one year group is simply applied to all rising one year birds on hand at the end of the income year. Any change between the opening and closing valuation in the income year is assessable for income tax purposes.

Step ten: For the rising two year and older grouping, an inventory system for multi-aged bird groups will be required, unless individual recording and tracing is undertaken. This may be accomplished using the FIFO or Average Cost Inventory System currently used for specified livestock.

For the rising two year and older group, the allocation of average cost is a little more difficult. This is because this group will contain birds of various ages, possibly over a range from 2 to 30 years. Each will have an associated historical cost relating to the year in which it reached maturity. If individual bird recording is practised, then no complexities will arise. New birds will enter with current year average cost, and any deaths or sales of older birds will have a deduction from the total book value of birds on hand at their historical cost. Any net change between the opening and closing values for the income year will be assessable for income tax purposes.

If individual bird recording is not practised for the mature group, an inventory system of some description will be needed. The FIFO system is the most likely to be used as it will allow a faster phasing out (larger deduction) for the very high cost birds originally purchased as these are progressively replaced by lower costing stock (either at purchase or homebred as the industry expands).

The Average Cost Inventory System is an alternative system, and is the method most commonly used for specified livestock enterprises. This method allows sales and deaths to reduce book values at last year's average cost, and the new intake of birds, e.g. replacements, to be brought in at this year's calculated cost

per head. A new average over all the closing birds on hand is then calculated for the year. Details of this system, together with examples are contained in the Appendix to Inland Revenue's *Tax Information Bulletin*, Volume Four, No 7, (March 1993) for specified livestock. Under either of these inventory systems, any difference in the total opening and closing values for the income year is assessable for income tax purposes.

8.0 Other issues

8.1 Movement between options

As industry and individual bird farming situations change, it is likely that some movement between valuation options will occur, e.g. an initial purchaser of breeding stock who progressively breeds replacement stock and moves from market values to cost for the end of year inventory valuation. The rules for movement between options should generally be those applying to other industries, i.e. free movement between the cost scheme to the market value or replacement price schemes.

Either of the (complete) inventory groupings can be valued at market value or replacement price without notice to Inland Revenue if this involves a change from the cost option of valuation used in the previous year.

When a change to the cost option occurs, the values of birds on hand at the end of the preceding year will be deemed to be cost for the purposes of calculating current income year average costs per head.

8.2 High priced scheme

The valuation of specified livestock includes a high priced scheme which incorporates a straight-line depreciation rate over the expected breeding life of the animal. "High-priced livestock" is defined in section OB 1 of the Act. As non-specified livestock is not high-priced livestock, ostriches and emus cannot be depreciated.

The high-priced livestock scheme is not considered appropriate for the emerging ostrich and emu industries. Market value or replacement options will achieve the same result as a 40-year breeding life (probably more quickly), which would only yield a 2.5% depreciation rate annually and would require a (moving) end of productive life value to be determined.

9.0 Special departures

Because of the unique nature of ostrich and emu farming, some departures from the strict cost regime detailed may be considered. These are listed below.

9.1 Fencing costs

The cost of ostrich farm fencing is high. Birds are run in pairs or trios in separate paddocks of about 0.25 hectares. Fences are similar to deer fences, and represent a high cost at the time of farm set-up, or enterprise expansion. For example, a 10 hectare block subdivided for breeding (80 ostriches on a pair basis) would require more than 6 km of fence, excluding access ways.

If all fencing costs are incurred in one income year, they will be loaded on to the cost of the ostriches produced in that income year. To avoid this it is suggested that the cost of fencing should be able to be spread over a number of years *for the purposes of calculating the cost of ostriches on hand*.

9.2 Entities which cannot use cost of production as an option

Certain taxpayers are not allowed to use (self-assessed) cost as a valuation option for valuing specified livestock. These are:

- Owners of bailed stock (bailors).
- Owners of leased stock (lessors).
- Non-farming parties to a sharefarming agreement unless, as part of the sharefarming agreement, it is agreed that the cost option is calculated by the farm owner as if no sharefarming agreement existed.

Such taxpayers are not allowed to use cost as a valuation method because they do not incur any costs, e.g. a bailor does not incur any costs, the costs are incurred by the bailee of the livestock.

For the same reasons, we suggest that the above taxpayers should not be allowed to use cost to value ostriches and emus.

In addition, in partnerships where partners own the individual birds put to the use of the partnership, partners must value their birds under an option common to the whole partnership, i.e. cost, or market value or replacement price, for all birds controlled by the partnership.