ANIMAL PRODUCTION

NOTES FOR THE GUIDANCE OF CONTRIBUTORS

CONTENTS

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INTRODUCTION

Animal Production publishes reports in English of *original* work in the field of animal production, or in any related scientific field. The Editors will consider articles on any aspect of research or development, providing the work described has been carried out in a systematic way, and articles critically re-examining published information. Reviews of the literature are not accepted. Reports on techniques will be published only as appendices to scientific papers. Contributions should be concise. Results of research which do not warrant a comprehensive presentation may be submitted for consideration as a *Note*. Notes are not intended for the publication of interim results. They should not exceed 2000 words or the equivalent inclusive of tables and illustrations.

Papers are published on the understanding that they have not been and, with the exception of authors' abstracts, will not be published elsewhere without the Editors' written permission. Authors' abstracts can be reproduced if full acknowledgement of the source is made.

MANUSCRIPTS

1. *Preparation of papers*

The responsibility for the preparation of a paper in a form suitable for publication lies in the first place with the authors. They should consult a current issue in order to make themselves familiar with the layout and style of the journal. The typographical and other conventions to be adopted are set out below.

Statistical treatment of results. The methods of statistical analysis must be indicated but statistical details should be given only if they are relevant to the discussion. Where reference is made to statistical significance, the level of significance attained should be indicated. The conventional abbreviations are NS for non-significance and *, ** and *** respectively for significance at the 0·05 (5%), 0·01 (1%) and 0·001 (0·1%) levels.

Tables should be as simple and as few as possible. The same material should not normally be presented in both tabular and graphical form. In designing tables, authors should take account of the size and shape of the pages of *Animal Production*. Each table should be typed, preferably in double spacing, on a page separate from the main body of the text and an indication given in the text where it should be inserted. Tables should be given arabic numbering and each should have its own explanatory title (in italics, i.e. underlined). Subtitles are also in italics and, if on a separate line, are in a smaller type size.

Column headings should be concise and units should be clearly stated using standard abbreviations. Only the first letter of the first word is in capitals. Cross-headings (dividing a table into several parts horizontally) are normally italicized. Stub-items (describing the data in the rows) should be indented relative to cross-headings; where they involve printing on more than one line they should be indented in the second and subsequent lines. Sub-stub-items should also be indented.

Footnotes should be used sparingly and kept brief. The reference symbols used are, in order, † ‡ § ‖ ¶. Numbers and letters should be avoided. Asterisks should be reserved for indicating levels of statistical significance which must be explained in a footnote.

Abstract. Every paper should have a short abstract (not more than **250** words) complete in itself and understandable without reference to the paper. It will be printed at the beginning of the paper. It is often preferable for the abstract to be arranged in short numbered paragraphs. It should state succinctly the problem, the experimental methods, results and conclusions. Abbreviations and references must be avoided. Further information on the writing of an abstract may be obtained from *Writing Scientific Papers in English* (Elsevier, Amsterdam, 1975).

References. Literature cited should be listed in alphabetical order of authors. Bibliographical details should be in the following order: author's name, initials, year, title of paper in English (when translated, put title in square brackets), title of journal—abbreviated according to the *World List of Scientific Periodicals* (4th ed., Butterworth, London, 1963/65), volume of journal, first and last page of paper. (A selected list of titles of biological journals abbreviated according to these recommendations has been published in *Abbreviated Titles of Biological Journals* (3rd ed. Biological Council, London, 1968).) When abstracts are referred to, the page reference should be followed by (Abstr.). A full stop should follow the 'author' even if it is an institution or if the first name in full replaces the more usual initials.

References should be set out as in the following examples:

BLAXTER, K. L. and WILSON, R. S. 1962. The voluntary intake of roughage by steers. *Anim. Prod.* **4**: 351–358.

HAMMOND, J. 1932. *Growth and the Development of Mutton Qualities in the Sheep.* 2nd ed. Oliver and Boyd, Edinburgh.

MOUSTGAARD, J. 1962. Foetal nutrition in the pig. In *Nutrition of Pigs and Poultry* (ed. J. T. Morgan and D. Lewis), pp. 189–206. Butterworth, London.

If only single pages in a book are referred to, these should be given after the title. Note also:

Tech. Bull. Ore. agric. Exp. Stn, No. 96.
Ph.D. Thesis, Fac. Agric., Univ. Reading.
Proc. Conf. Eur. Ass. Anim. Prod., Gödöllö, Hungary.
Proc. 8th int. Grassld Congr., Reading, p. 606.
Rep. agric. Res. Coun., 1962/63, p. 16.
In press.
(Mimeograph).

In the text, references should be cited by author and year. At the first mention all authors should be named; thereafter, papers with more than two authors should be referred to by the first author followed by *et al.* Names of organizations used as authors (e.g. Milk Marketing Board, Agricultural Research Council) should be written out in full in the list of references and on first mention in the text. Subsequent mentions can be reduced to MMB, ARC etc. Ampersands (&) should be avoided and multiple references should be as follows:

(Keith *et al.*, 1955 and 1959; Flint and James, 1958a and b).

'Personal communication' should follow the name of the author in the text, where appropriate. The author's initials should be included but not his title. Such citations should not be included in the list of references.

Check that all of the references in the text are in the list of references and *vice versa.*

Title. A title needs to be concise yet informative. It should:

(*a*) arrest the attention of a potential reader scanning a journal or a list of titles,
(*b*) provide sufficient information to allow the reader of a title journal to judge the relevance of a paper to his interests and whether it will repay the effort of obtaining it,
(*c*) incorporate keywords or phrases that can be used in indexing and information retrieval, and
(*d*) avoid inessentials such as 'A detailed study of . . .'

2. *Typing*

Manuscripts should be typewritten on one side of the paper in double-line spacing with wide margins and each page should be numbered. *The lines on each*

page of the manuscript also should be clearly numbered beginning with number one at the top of each page. The top copy should be on good quality paper.

3. *Illustrations*

(*a*) *Diagrams* should be drawn in Indian ink, on Bristol board, stout tracing paper or plastic film, about twice the size of the finished block, which will be the smallest size (printed) consistent with clarity. Photographed diagrams are also accepted. Lettering inside the framework of the diagram should be avoided as far as possible; if unavoidable it should be included on a fly-leaf. Marginal lettering should be inserted lightly in pencil on the original diagram or on a fly-leaf.

(*b*) *Plates:* Photographs intended for half-tone reproduction should be on glossy paper and will be accepted only if found necessary by the Editors. Colour plates are unlikely to be accepted unless authors bear the cost.

(*c*) *Captions* for all figures should be typed on a sheet of paper separate from the body of the text, but an indication of where a figure should appear should be given within the text. Diagrams and Plates are referred to within the text as Figure 1, Figure 2, etc., but captions begin with Fig. 1., Fig. 2., etc. Plates are numbered consecutively throughout the *Volume* by the publisher but they should also have a Figure number in the same series as diagrams within the paper.

4. *Submission of papers*

Three, or exceptionally two, copies, one of which must be the original, of the typescript and illustrations are required by the Editors. Manuscripts are not returned with proofs; authors should therefore retain copies.

TYPOGRAPHICAL CONVENTIONS AND CONSISTENCIES

1. *Headings*

Animal Production convention is as follows:

(*a*) *Title* of the paper is in large capitals and any subtitle is in small capitals. Authors' names are in capitals and small capitals and their addresses are in italics. (Addresses include country names only for countries outside the United Kingdom.)

(*b*) *Main section headings* (ABSTRACT, INTRODUCTION, MATERIAL AND METHODS, RESULTS, DISCUSSION, ACKNOWLEDGEMENT(S), REFERENCES) are printed in small capitals throughout and placed centrally in the line of type. (In *Notes* the only headings required are ABSTRACT, ACKNOWLEDGEMENT(S) and REFERENCES.)

(*c*) *Subheadings* are italicized and only the initial letter is in capitals. The two main classes are:

(i) Side italics unpunctuated (shoulder headings).
(ii) Indented italics, punctuated and text run-on (side headings).

When more than two types are needed, centred italics (iii) may be used.

The sequence is always (iii) to (i) to (ii). In cases where only one type is required it is left to the editors' discretion which class is adopted.

Note. In manuscripts, capitals are denoted by triple underlining (≡) and small capitals by double underlining (=), italics by single underlining (—·-) and bold type by a wavy line (~~~).

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2. *Capitals*

(*a*) Initial capitals are used for proper nouns, for adjectives formed from proper names, for generic names, and for names of classes, orders and families.

(*b*) Names of diseases are not normally capitalized.

3. *Italics*

Words to be italicized should be underlined in manuscript or typescript. Use italics for:

(*a*) titles of books and names of periodicals in the text and in references,

(*b*) authors' addresses,

(*c*) subheadings (see above),

(*d*) titles for tables (but not captions for figures),

(*e*) most foreign words, especially Latin phrases,

e.g.	but *no italics* for	
ad hoc	corpus luteum	
ad libitum	cf.	no following comma
et al.	e.g.	no following comma
in situ	i.e.	no following comma
inter alia	N.B.	no following comma
inter se	post-mortem	(adverb)
in vitro	post-partum	(adverb)
per se		
post mortem		(adjective)
post partum		(adjective)
vide		

(*f*) mathematical unknowns and constants,

(*g*) generic and specific names,

(*h*) letters or numbers in the text which refer to corresponding letters or numbers in an illustration,

(*i*) letters used as symbols for genes or alleles e.g. Hb^A, Tf^D (but not chromosomes or phenotypes of blood groups, transferrins or haemoglobins e.g. HbAA, TfDD),

(*j*) first occurrence of a special term,

(*k*) repeated emphasis of a special term (use cautiously),

(*l*) Latin names of muscles (but not of bones), e.g. *m. biceps femoris*.

4. *Hyphens*

In *numerical* expressions hyphens should be used:

(*a*) between the numerator and denominator of a fraction when spelled out (e.g. one-third), and in compound numbers (e.g. twenty-four),

(*b*) in adjectival phrases such as '3-year-old' when they precede the noun,

(*c*) between figures in tables to indicate a range. In running text the word 'to' is usually preferable. Always write 'from 9 to 12' not 'from 9–12' except when it is in the form 'from 9–12 to 18–21'.

Temporary hyphens should be used as follows:

(*a*) In compound modifiers (double-barrelled adjectives or phrases used attributively) when it is necessary to avoid misunderstanding or to aid understanding, e.g. short-term trend, two-egg twin, 12-week period, all-pelleted diet. Note the difference in meaning between 'superfluous-hair remover' and 'superfluous hair-remover' and between 'white-fish meal' and 'white fish-meal'.

(*b*) After some prefixes used temporarily (e.g. anti-oestrogenic, ex-army, intra-class, non-active, pre-treatment, semi-conductor).

Hyphens should be avoided:

(*a*) between the parts of a compound modifier which follows the noun modified (e.g. the wool was dirty white),
(*b*) between the parts of a well known open-compound noun used to modify a substantive (e.g. sodium chloride solution, post mortem examination),
(*c*) between an adverb and the objective it modifies even if they precede the noun (N.B. 'well known scientist' but dirty-white wool').

Permanent hyphens should be used between the parts of a compound noun (or verb) not yet acceptable as a single word. The necessity for a link between the two parts is normally indicated by the reduction of two accents to one and the fact that the compound word has a different meaning from the two words used separately. It is preferable to join up the single elements if possible without offending or misleading the eye, e.g. 'crossover' but not 'crosssection'.

For special cases see the section on *Spelling* (p. xv).

5. *Numerals*

(*a*) In text, use words for numbers zero to nine and figures for higher numbers. In a series of two or more numbers, use figures throughout irrespective of their magnitude.
(*b*) For large numbers in the text substitute '$\times 10^n$' for part of a number (e.g. $1{\cdot}6 \times 10^6$ for 1 600 000).
(*c*) Use figures whenever a number is followed by a standard unit of measurement (e.g. 100 g, 6 days, 4th week).
(*d*) Use figures for dates, page numbers, class designations, fractions, expressions of time, e.g. 1 January 1966; page 5; type 2.
(*e*) Sentences should not, however, begin with figures.
(*f*) The decimal sign between digits in a number should be a point (·).
(*g*) To facilitate the reading of long numbers the digits should be grouped in threes about the decimal sign but no point or comma should be used.
(*h*) For values less than unity, 0 should be inserted before the decimal point.
(*i*) The multiplication sign between numbers should be a cross (x).
(*j*) Division of one number by another should be indicated as follows: 136/273.
(*k*) Where figures are altered by multiplication, the multiplication factor must be clearly shown, e.g. a series of variance estimates multiplied by 10^4 would be headed 'Variance ($\times 10^4$)', not $\times 10^{-4}$ which would be the power necessary to reduce them to their original values.
(*l*) Dates should be given with the month written out in full in the text and with the day in figures (i.e. 12 January *not* 12th January). Single non-calendar years should be written 1961/62; periods of two calendar years as 1961–62, and of two non-calendar years as 1961/63–63/64.
(*m*) For time use 24-h clock, e.g. 13.20 h.

6. *Parenthesis*

Parenthesis takes four main forms: (*a*) commas, (*b*) dashes, (*c*) round brackets and (*d*) square brackets. A general rule is almost impossible to formulate, but it should be noted that the 'strength' of the parenthetical effect increases from (*a*) through (*b*) and (*c*) to (*d*). It follows therefore that (*d*) should be avoided if (*c*) will suffice, and so on. It should be noted that the distinction in emphasis between (*b*) and (*c*) is very marginal. Square brackets (*d*) are often used to denote material inserted by a quoter, editor or translator.

Note that a dash is differentiated from a hyphen by typing the former as two unspaced hyphens.

7. *Quotation marks*

Single quotation marks should be used around:

(*a*) all direct quotations,
(*b*) titles of articles and parts of books (in the text, not in list of references),
(*c*) new technical terms or old terms used in a new sense.

Double quotation marks should be used around a word, title or term within a quotation.

If a quotation extends over more than one paragraph, begin each paragraph with a single quotation mark but close the quotation only at the end of the last paragraph.

8. *Spelling*

The spelling of the *Shorter Oxford English Dictionary* (*SOED*) (3rd ed., Clarendon Press, Oxford, 1944), should be used, except that the hyphen should be omitted from compound words in common use. The following specific words for which there is a preferred spelling or which, because of their specialized nature, are omitted from SOED, should be noted. Care should be exercised in the use of agricultural terminology that is ill-defined and of local familiarity only.

acclimatize
acknowledgement
ageing
albumen (egg white)
albumin (protein)
amino acid
analyse
antenatal
autosexing

backfat
biased
birthcoat
birth type
birth weight
bloodline
body weight
breech (not britch)
by-product

Caesarean
cannon bone
carcass
carotene
†clear-cut
coloration
connexion
cooperate
coordinate
covariance
cover-slip
crossbred
cross-section
crossing-over
cryptorchidism

deflexion
depot
dioestrus
draft
dressing percentage
†dry-matter
dry matter (noun)
†dual-purpose
dystocia

egg-yolk phosphate
élite
eye muscle
†eye-muscle area

†fat-corrected
feed-back
foetuses
fish meal
flockbook
foodstuff
forequarter

gelatin
genotype × environment interaction
gonadotropin
greasy weight
grey
guinea-pig

halfbred
†heat-resistant
herdbook
†high-producing
hindquarter
homeothermic

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indexes (books)
indices (mathematics)
inflexion
-ize (not -ise) as suffix in verbs (but not, of course, in advise, comprise, compromise, devise, enterprise, excise, exercise, improvise, revise, surprise).

killing-out percentage

leucaemia
leucosis
life cycle
lifetime
linecross(ing)
linebred
linebreeding
littermate
liveborn
livestock
live weight
†live-weight gain

meiosis
milk fat
†milk-recorded

neonatal
newborn

oestrous (adj.)
oestrus (noun)
ovariectomy
overall (noun, adv. or adj.)
overestimate

perinatal
post-mortem (adv.)
†post-weaning
prenatal
†pre-weaning
product-moment correlation
†progeny-tested
pronucleate
pseudopregnant
purebred
purebreeding
pycnosis, -notic

racehorse
reflexion
rôle

†self-fed
†self-feeding
sex linkage
sex-linked
skim milk
soya bean
spay
stillbirth
stillborn
studbook
subclass
subgroup
sugar beet
summarize

test-tube
textbook
thyroxine

underestimate

wooled
woollen
woolly

† Hyphenate only when used as adjective and preceding noun.

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9. *Units of measurement*

The International System of Units (SI) should be used, with the recommendations and modifications in *Quantities, Units and Symbols.* The Royal Society, London, 1975 and *Metric Units, Conversion Factors and Nomenclature in Nutritional and Food Sciences.* The Royal Society, London, 1972—reproduced in *Proc. Nutr. Soc.* **31**: 239–247, 1972. The abbreviations for some of the commoner units are as follows. The same abbreviation is used for singular and plural.

day	day
degree Celsius	°C
gram	g
hectare	ha
hour	h
hydrogen ion concentration, negative exponent	pH
joule	J
litre	l†
metre, square metre, cubic metre	m, m^2, m^3
minute	min
molar concentration (mol/l)	M
mole	mol
pascal	Pa
second	s
tonne (metric ton)	t

† If there is no possibility of confusion.

Only a few commonly used metric combinations are included in the above list. The following prefixes may be used to construct decimal multiples of units.

Mutliple	*Prefix*	*Symbol*
10^{-12}	pico	p
10^{-9}	nano	n
10^{-6}	micro	μ
10^{-3}	milli	m
10^{-2}	centi	c
10^{-1}	deci	d
10^{2}	hecto	h
10^{3}	kilo	k
10^{6}	mega	M

Decimal multiples of the kilogram (kg) should be formed by attaching an SI prefix not to kg but to g, in spite of the kilogram and not the gram being the SI base unit.

A combination of prefix and symbol for a unit is regarded as a single symbol which may be raised to a power without the use of brackets, e.g. cm^2, cm^3.

Multiplication and division of units. A product of two units should be represented as N·M and a quotient as N/M.

Concentrations or composition. Compositions expressed as mass per unit mass or mass per unit volume, commonly referred to as weight per unit weight (w/w) and weight per unit volume (w/v), should have as denominator the unit of mass, the kilogram, or the unit of volume, the litre. Values should thus be expressed as nanograms, micrograms, milligrams or grams per kilogram or per litre.

Concentrations or compositions should not be expressed on a percentage basis. Common ratios used in nutritional studies, for example digestibility, should be expressed as decimals.

Vitamins. All amounts of vitamins should be expressed in terms of their mass rather than in terms of international units.

10. *Symbols and standard abbreviations*

These can be used without prior explanation. Chemical symbols for atoms and molecules should be used in the text only if they occur repeatedly.

(*a*) *Mathematical symbols*

smaller than	$<$
larger than	$>$
smaller than or equal to	$\leqslant$
larger than or equal to	$\geqslant$
equal to	$=$
not equal to	$\neq$
approximately equal to	$\approx$
approaches	$\rightarrow$
proportional to	$\propto$
infinity	∞
female	♀
male	♂
plus	$+$
minus	$-$
plus or minus	$\pm$
a multiplied by b	ab
a divided by b	a/b
a raised to the power n	a^n
nth root of a	$a^{1/n}$
mean value of a	$\bar{a}$

(*b*) *Statistical terms*

coefficient of variation	CV
correlation coefficient	*r*
degrees of freedom	d.f.
expectation of mean square	e.m.s.
least significant difference	LSD
mean square	m.s.
multiple correlation coefficient	*R*
probability	*P*
regression coefficient	*b*
standard deviation	s.d.
standard error	s.e.
standard error of estimate or residual standard deviation	*Sy.x* or residual s.d.
variance ratio	F

(*c*) *Standard abbreviations*

abstract	abstr.
anhydrous	anhyd.
approximate(-ly)	approx. or *ca.*
aqueous	aq.
average	av.
boiling point	b.p.
British Pharmacopoeia (designation of reagent quality)	B.P.
dilute	dil.
distilled	dist.
Experiment	Expt
Figure (in captions only)	Fig.

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freezing point	f.p.
heritability	h^2
liquid	liq.
live body weight (mass) (in formulae)	M
logarithm (in formula)	
common	$\log_{10}$
natural	$\log_e$
maximum	max.
melting point	m.p.
minimum	min.
number	no.
observed	obs.
recrystallized	recryst.
relative humidity	r.h.
respiratory quotient	r.q.
soluble	sol.
solution	soln
species (taxonomy)	sp.
specific gravity	sp. gr.
versus (i.e. compared with)	*v.*

Elements and compounds may be represented by their chemical symbols. The symbol is not followed by a full stop. The right superscript position should be used, when required, to indicate ionic charge (e.g. Cl^-). The mass number and the number of atoms per molecule should be specified as follows:

mass number $^{14}N_2$ atoms per molecule

Acronymic titles of computer languages are printed in small roman capitals and should be doubly underlined in the typescript.

(*d*) *Forms of address*

Dr, Ir, Jr, Ltd, Messrs, Miss, Mr, Mrs, Ms—without full stop.

11. *Other abbreviations*

These abbreviations should be avoided in the text unless the expression occurs very frequently. They should be given normally in full at first textual reference followed by the appropriate abbreviation in brackets.

The rules for the full stops are:

(1) Abbreviations in capitals have no full stops.
(2) Lower case abbreviations have full stops unless the last letter of the abbreviation is also the last letter of the word.

Commonly used abbreviations are as follows:

adenosine triphosphate	ATP	electrocardiogram	e.c.g.
adrenocorticotrophic hormone	ACTH	fat-corrected milk	FCM
artificial insemination	AI	follicle stimulating hormone	FSH
basal metabolic rate	b.m.r.	gas-liquid chromatography	g.l.c.
central nervous system	c.n.s.	Greenwich Mean Time	GMT
centre of gravity	c.g.	haemoglobin	Hb
deoxyribonucleic acid	DNA	infrared	i.r.
diameter, inside	i.d.	luteinizing hormone	LH
diameter, outside	o.d.	metabolizable energy	ME
digestible crude protein	DCP	net energy	NE
digestible energy	DE	non-protein nitrogen	NPN
digestible organic matter	DOM	organic matter	OM
dry matter	DM	pregnant mare's serum	PMS

protein equivalent	PE	thin-layer chromatography	t.l.c.
red blood corpuscle	r.b.c.	thyroid stimulating hormone	TSH
ribonucleic acid	RNA	total digestible nutrients	TDN
solids-not-fat	SNF	total solids	TS
starch equivalent	SE	ultraviolet	u.v.

NOMENCLATURE OF FARM ANIMALS

1. *General*

In the Material and Methods section, a clear definition should be given of each class of animal used in terms of species, breed (or cross), sex, age and physiological state. The agricultural function(s) of the class can often be added with advantage. This definition should precede the standard term (given in brackets) which may then be used in the Title, Summary, Introduction and subsequently in the text.

2. *Descriptive words for use in definition*

Species:	Cattle, sheep, goat, pig (or swine), horse, ass, fowl, turkey, duck, goose.
Breed:	Use full name (e.g. 'British Friesian' or 'Holstein-Friesian' *not* 'Friesian'). Consult Mason's *Dictionary of Livestock Breeds* (2nd ed., Commonwealth Agricultural Bureaux, Farnham Royal, 1969) for recommended English usage.
Crosses:	Show the breed constituents and sexes of respective parents. For example, a 3-way cross might be: Suffolk ♂ × (Border Leicester ♂ × Scottish Blackface ♀)♀.
Sex:	Male (or ♂), female (or ♀), male castrate (♂ castrate), female castrate (♀ castrate). The symbols should not normally be used in the text.
Age:	(i) Whenever possible in terms of days, weeks, months or years, as appropriate. (ii) In addition (or alternatively, if necessary) weight or weight range, or other size dimensions, describing the limits of the class.
Physiological state:	Growing, pregnant (or non-pregnant), lactating (or non-lactating), working, wool-producing, laying.
Breed function:	Milk (or dairy), meat, wool, hair, work, egg.

(N.B. *Avoid* hyphenated terms to link different states or functions, e.g. meat-milk, pregnant-lactating, growing-fattening).

3. *Standard sex and age terminology*

Standard terms should be as precise as possible, e.g. write 'male calf' not 'bull calf', 'pregnant cow' not 'in-calf cow'. Terms should not be used to describe a defined class where the normal meaning of the term runs counter to the defined usage, e.g. where pregnancy has been induced in 3-month-old female sheep call them 'pregnant females' not 'lambs'.

	Young		*Adult*		
	♂ and ♀	Approx. upper age limit	♂	♀	Castrate
Cattle	calf	8 months	bull	cow (heifer)†	steer
Sheep	lamb	6 months	ram	ewe	wether
Goat	kid	6 months	buck	doe (goatling)†	—
Pig	piglet	8 weeks	boar	sow (gilt)†	barrow
Horse	foal	12 months	stallion (colt)†	mare (filly)†	gelding
Fowl	chick	with down	cock (cockerel)†	hen (pullet)†	capon
Turkey	poult	with down	stag	hen	—
Duck	duckling	with down	drake	duck	—
Goose	gosling	with down	gander	goose	—
Rabbit	—	—	buck	doe	—

† Alternative names for the young adult. In some instances the use is strictly defined, as for heifer to the end of the first lactation, for goatling and gilt to the end of the first pregnancy and for pullet to the end of the first moult.

PROOFS

The following guidance is given by the Royal Society (see 'Authoritative Sources' below).

'Proofs are submitted so that authors can make sure that the printers have reproduced the typescript faithfully. Authors should not insert new matter into proofs or correct faults in the style or arrangement of their papers at this stage. Many journals quite justifiably ask authors to pay for the heavy cost of alterations made in proof that do not arise from mistakes in the setting up. However, any errors of fact or of logic that have escaped earlier notice must be corrected, even at this stage. . . .

'Authors are advised to pay particular attention to checking scientific and proper names, numerical data, formulae, tables and illustrations. Whilst printers' readers are competent in correcting proofs dealing with subjects of which they have no specialist knowledge, the ultimate responsibility for the correction rests with the author. The proofs should be compared with the original typescript, and it is helpful to have the proofs read by a colleague, since it is very difficult for an author to see mistakes in his own work.

'Marks for proof corrections are given in British Standard 1219 : 1958, *Recommendations for proof correction and copy preparation.* The tables of symbols from this standard are available printed on stout card as British Standard 1219C : 1958. Corrections should be made as legibly as possible in ink, not pencil. Incorrect use of printers' symbols can be extremely misleading, and when a complicated correction has to be made it is better to write a note in the margin explaining in plain English what is wanted. Directions to the printer which are not to be set up in type should be encircled.'

AUTHORITATIVE SOURCES

The following sources are taken as authoritative in matters not covered herein:

FOWLER, H. W. 1965. *Modern English Usage*. 2nd ed. Revised by Sir Ernest Gowers. Clarendon Press, Oxford.

O'CONNOR, M. and WOODFORD, F. P. 1975. *Writing Scientific Papers in English*. Elsevier, Amsterdam.

THE ROYAL SOCIETY. 1974. *General Notes on the Preparation of Scientific Papers*. 3rd ed. The Royal Society, London.

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