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Quality control in report writing and its implications for the arboricultural profession

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Quality Control in Report Writing and its Implications for the Arboricultural Profession

Report writing is an essential element of practice for all professions. Within the Arboricultural Profession, there has been little guidance on the detail of report writing and no strategic approach. This has resulted in variable report quality and slow professional development.

This paper discusses the basic principles of report writing. It focuses on formal reports and identifies all the elements that authors should consider for inclusion. It advocates that the adoption of standardised report formats is a fundamental requirement for the rapid evolution of the Arboricultural Profession

INTRODUCTION

For most professions, the written word is the permanent record of performance. Indeed, it is often the case that the better a profession organises its writing the more professional its members are deemed to be. Not surprisingly, the well-established professions are the most organised; solicitors and surveyors being two obvious examples. Their daily work is characterised by standard forms and templates for all the written necessities. In contrast, the younger and emerging professions, of which Arboriculture is just one, have not yet had time to develop a similar level of sophistication or standardisation. Written reports are a vital part of a professional's activity and their quality has a significant impact on that person's status. In the wider context, there is a direct knock-on effect for their profession.

In common with other professions, it is acceptable in Arboriculture to vary report formats depending on the purpose of the report. At one end of the range, information presented as brief notes in a pro-forma manner can be appropriate. This approach has limitations and can be misleading but is suitable if that is all that is required, e.g. in an inventory situation for systematically collected data on large numbers of trees. At the other extreme, reports that discuss complicated issues require a more descriptive presentation. Specialist formats have also evolved to meet very specific requirements; expert witness statements and proofs of evidence for public inquiries are two obvious examples. This paper specifically covers formal writing that falls between the pro-forma approach and the specialist reports. However, most of the principles discussed apply across the whole range of report formats.

DEVELOPMENT OF ARBORICULTURAL CONSULTANCY IN THE UK

Whilst there is a long standing tradition of tending trees and shrubs for amenity and commercial interests in the UK, arboriculture was not recognised as an Industry until the early 1950s (Bridgeman, 1976). From this practical origin emerged the first signs of the fledgling Arboricultural Profession with the appointment of the first full time Arboricultural Officer for the London County Council and the establishment of the first certificated arboriculture examinations. In 1964, the formation of the Arboricultural Association (AA) represented a significant step towards co-ordinating the professional elements of the Industry. Simultaneously, the craft elements were also organising their affairs with the formation of the Association of British Tree Surgeons and Arborists. In the 1970s, the amalgamation of these two organisations seemed a natural progression towards a stronger Profession and Industry. However, in retrospect, this blurred the boundaries between the professional and craft levels. In the longer term, this effectively stalled the development of the Profession in both the private and public sectors, a legacy that remains with us to this day.

The formation of the AA Directory of Consultants and Contractors in the late 1970s further blurred this lack of definition between Industry and Profession. Initially, the practicalities of promoting both elements under the same cover appeared logical; it was cost effective and administratively friendly. Nevertheless, throughout the 1980s and early 1990s this format became increasingly problematic. Within Arboriculture, it was not clear exactly who should be undertaking consultancy. It became common place for craftsmen, many very skilled but with no formal training, to try to write reports. Externally, other professions were attempting to do arboricultural consultancy because they were having difficulty deciding where to go. An obvious example was the Insurance Profession asking tree surgeons to write mortgage reports. There was widespread confusion; the Professional part of Arboriculture was in disarray. This was finally recognised in the AA Review (Bridgeman et al,

1995) and in 1996, a separate Register of Consultants was published for the first time.

There can be little doubt that the AA Register of Consultants has been a success in terms of raising the profile of those top twenty or so consultants who have met the entry requirements. Despite slow recruitment, in the absence of any similar references, it gained an elite status and was widely seen to represent the top end of the Profession. However, this limited achievement left the majority of active consultants who formed the rest of the Profession effectively on their own; abandoned with no arboriculturally orientated guidance on how to prepare, write or present reports. By the beginning of the 1990s, the Arboricultural Profession certainly existed but it lacked sophistication. It was poorly organised and had no quality in depth.

In parallel with these developments, the demand for arboricultural reports dramatically increased during the 1990s. This was primarily driven by an insurance sector that was becoming acutely aware through increased claims that trees were affecting buildings and costing them money. The only organised source of specialist tree consultants was the AA Register but the limited numbers were unable to meet the increased demand. The Profession was unable to cope so the Industry filled the market niche. Tree surgeons with no formal training in consultancy began to write reports with increasing frequency. It was not until 1995 that specific training to help consulting arborists meet this demand became available through the Liverpool based consultancy practice of O'Callaghan Associates (OCA) Ltd (OCA, 1995). Their certificated training module on mortgage reports provided the basis for the Mortgage and Insurers Users Group which became the first professional affiliation of the United Kingdom & Ireland Chapter of the International Society of Arboriculture (ISA) in 1996. Simultaneously to this UK development, the US American Society of Consulting Arborists was trying to raise standards in report writing by producing its *Guide to Report Writing for Consulting Arborists* (Abeyta, 1995) through the ISA. However, whilst this is still a useful reference, not all of its content is relevant to the UK and there remains no comprehensive arboriculturally orientated report writing guidance for practising consultants.

Taking a wider perspective, lack of expertise in report writing is an issue facing many professions and not just Arboriculture. This has been highlighted by Lord Woolf who specifically notes the problem in his recent proposals to reform the Civil Justice system (Woolf, 1996). He places particular emphasis on improving the training for experts, wider standardisation of report formats and improved clarification of their role. The Government has accepted the main thrust of his report and is considering full implementation. Report writing has been identified as an important issue at the highest levels and the future integrity of many professions will depend on how they respond in this rapidly evolving professional arena.

BASIC PRINCIPLES OF REPORT WRITING

Writing clear concise reports is difficult, but it need not be limited to academics or those who have a natural ability. It is a skill that can be learned by anyone who is prepared to identify and understand the basic principles. A good command of language and grammar is necessary, but subtler factors will determine the quality of the finished product. Attitude is far more important than ability; attention to detail and a thorough grasp of basic principles are the essentials of advanced writing.

On the most basic level, a report is the focus of a business relationship between the author and the reader. How well the author meets the reader's requirements will dictate the success of this relationship. The reader wants a report to be well laid out, pleasant to look at, easy to navigate, easy to read, easy to understand and clearly reasoned. Reports that make life easy for the reader are good for business because they lead to further commissions. Successful business relationships are also good for the author's profession because they establish a level of respect and credibility that is essential for its rapid advancement.

Visual appeal is the number one issue in successful business writing (Pryor, 1997). First impressions starting at the front cover are important, and the way a document looks will have a significant impact on its final success. Large blocks of text quickly deter readers and encourage superficial study. Plenty of white space around discrete packages of information presented in a variable way is the key to keeping the reader's interest. Breaking up text with bulleted/numbered lists, figures and tables looks good and enhances comprehension (Figure 1a). Visually interesting reports will retain the reader's attention and leave a favourable lasting impression.

Authors should make it easy for readers to navigate through the report by presenting this variable information within a formal and logical structure. Readers are unlikely to be familiar with the detail of the report and will want to identify the important elements easily. Speed and ease of navigation are the hallmarks of a good report; layout and

presentation are the means of achieving this. Well-defined conclusions at the end and a concise summary at the beginning focus the reader's attention on the main issues. A contents page and individual page labelling speeds up the location of specific sections. Paragraph headings pinpoint topics without having to trawl through lots of text (Figure 1b). Logical section and paragraph numbering allows rapid cross and back referencing (Figure 1c). Using appendices as a side store reduces the length of the main text and significantly improves readability. Fully grasping this concept of navigation is a fundamental requirement for any aspiring report writer.

The way in which language is used, or the style of writing, is an important factor in the quality of the finished product. Inexperienced authors commonly assume that the reader will have their level of knowledge on the subject. In practice, the vast majority of readers have no or only 'lay' knowledge, which is why the report was required in the first place. Complicated or undefined technical words alienate readers who do not know their meaning. Understanding is enhanced simplicity; authors should use short words, cut words where possible and avoid the use of technical terms or jargon where there is an everyday English equivalent (The Economist, 1993). Nothing should interfere with the flow of the text and continuity of meaning should persist between consecutive sentences, paragraphs and sections.

All reports contain elements of observed or known facts (objective content) and an appraisal based on opinion (subjective content). How authors manage these very different parts within the report is often taken as a direct measure of their professional credibility. This issue has been highlighted through reports presented as evidence in court. Some senior judges have expressed concern over the tendency of experts to mix matters of fact and opinion in their reports (Academy of Experts, 1995). On the basis that all written reports could eventually be put before the courts, it is wholly appropriate to address these concerns in a comprehensive approach to report writing. Effectively distinguishing subjective opinion from objective matters-of-fact is a very important principle for all professional reports.

Self-preservation in terms of financial security and protection of professional integrity must have a high priority if an author is to survive and be successful in the long term. There is always the chance that reports may be drawn into legal proceedings and authors must try to minimise their exposure to risk in such situations. Reports that are stand-alone and clearly define any limitations by the use of caveats increase the level of protection for the author. Ignoring these safeguards will invariably prove to be a false economy, if not disastrous, in the longer term.

Before starting to write, authors should consider a number of basic questions to focus their attention:

- **What is the purpose of the report?** A report is the formal presentation of written answers to specific questions. The clarity and definition of the questions directly affects the quality of the answers. Identifying these questions is always the first step in the report writing procedure. It can be called a 'brief', an 'instruction' or the 'assignment'; whatever the name it is simply an up-front statement of purpose. Without it, time and effort will be wasted.

- **Who will use the report?** The language, format and presentation of a report can vary but should be primarily dictated by the target audience. Age, nationality, ethnic background, gender and professional status may all serve to influence the final document. This will probably be obvious where the reader is a single person, company or group, but reports for wider circulation will require careful consideration.

- **What format is most appropriate?** The level of detail indicated by the brief will determine the most appropriate format. In most instances, this will be obvious but authors should still consider all the options.

Authors who carefully identify these details at the beginning will be the most successful at producing quality reports in the end.

ELEMENTS OF A FORMAL REPORT

With the above principles in mind, an author can then begin to consider the many individual elements that form the whole report. Arboricultural reports can cover a broad range of subjects including subsidence, condition/hazard evaluation, management, property purchase, development appraisal and statements for legal hearings or planning inquiries. Systematic consideration and selective use of all the following elements is the basis for constructing all formal reports:-

Front cover: The front cover is the most frequently seen part of any report. It sets the scene for what is to follow and is often the main means for the end user to locate and identify the report. The way it

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looks conveys an initial subconscious impression to the reader that can often persist as the overall perception, irrespective of the actual quality of the contents. Lots of closely spaced information with a weak structure is a very confusing start. The front cover is the authors chance to set a very positive tone; minimal information surrounded by lots of space is the key to maximum impact (Figure 2a). The title is the only information that must always be on the front cover. It should identify what follows in the report, who it is for and who prepared it (Figure 2b). More detailed information about the author can be easily included further into the report where it will not dilute a crisp first impression. In some instances, the author's business logo may be appropriate (Figure 2c) but no other details such as addresses or telephone numbers should be included. Front covers send a very strong message to the reader; authors that get it right have the reader on their side; getting it wrong is a bad start and respect will be hard to recover.

Headers/footers: Every page inside the covers should have a unique reference that is obviously separate from the main text of the report (Figure 1d). This reference should include the author's name, the report title and reference number, the name of the client, the page number of the total number of pages and the date (Abeyta, 1995). Placing this at the top of the page as a header or at the bottom as a footer is a matter of choice for the author. It prevents individual pages being isolated and read out of context, provides the reader with useful reference information and allows accidentally mixed up pages to be re-organised correctly.

Summary/synopsis: The purpose of a summary is to provide an instant overview allowing the reader to subconsciously map out the report structure and provisionally identify the key points. To be useful, it must allow the reader to identify the purpose and results of the investigation quickly at a glance. To be effective, it should be concise and centrally placed on a single page. Whilst a summary is not absolutely essential for the short report of less than five pages, it is a subtle but valuable navigational aid for the longer reports and will significantly improve their ease of use. In practice, the summary is often completed at the end of the report writing process although it is normally the first part to be read.

Table of Contents: With the overview in mind, a reader may then want to locate a specific area of interest; perhaps the appraisal of a certain aspect or the recommended action for a particular situation. The table of contents allows the reader to quickly identify and locate specific pages. Like a summary,

it is not essential for short reports but it will help the reader navigate through longer reports and the author should not dismiss it lightly.

Introduction: Logic dictates that the main body of the report should start by setting the scene. The introduction should clearly define the questions that need answering, who is asking them, the basis on which they will be answered and any limitations that may apply. It should only contain facts and strictly avoid subjective discussion, interpretation or appraisal. The following sub-sections should all be considered for inclusion:

- **Brief:** The main report text should start with the instructing details; who the report is for and what are the questions that are to be answered. If these details are unclear, the author should seek to clarify them beyond doubt through further discussions before commencing fieldwork or starting to write. The author must clearly identify all the questions at this early stage because they will dictate the nature of the investigations and the reader will judge the report on how well they are answered. If there is more than one question, using a bulleted or numbered format will improve clarity.

- **Scope of the report:** In most situations, setting limits on what the report will cover is useful because it provides more detail of the framework within which the author is writing. For example, mortgage reports often require some comments on soils but in most cases, the arboriculturist will have limited soil expertise. Clarifying any limitations alerts the reader that other experts may need to be consulted if more detailed information is required. This sub-section is a natural extension of the brief and should be considered if there could be some confusion over precisely what is required.

- **Documents provided:** In many cases, authors are provided with plans, drawings or specific documents that may have a significant bearing on the appraisal and conclusions. It is essential to list and identify every document that is referred to in the report text or has influenced any aspect of the writing. This list should include the number of pages and any dates, and should be sufficient to identify each document. If no documents are provided, this should be recorded. Listing the documents seen is a vital safeguard because it helps clarify the boundaries and limitations within which authors are working and may prevent them being discredited at a later date.

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- **Relevant background information:** Additional information placing the report in a wider context is often useful because it helps set the scene. It may be historical in nature, or perhaps information gained through conversations on site. It should be included if it has some relevance to the appraisal and conclusions later in the report. The sources of all information should be included as a safeguard in case of future problems.

- **Qualifications:** Full qualifications should not be included in the main body of formal reports. They are invariably tedious, they are certainly not necessary for comprehension and they always disrupt the flow of the text. Their rightful place is in the appendices with only a brief reference in the body of the report. The only exception to this is expert witness statements for legal hearings or planning inquiries. These specialist reports have evolved in an adversarial environment where there is an emphasis on the qualifications of the expert witness.

- **Copyright:** Good layouts and well written text will always be vulnerable to unauthorised copying. In principle, the report format belongs to the author and is solely for the use of the named recipients. In practice, copying is difficult to prevent and the author has to accept it as an inevitable hazard of professional life. However, all reports should include a legally vetted wording in this sub-section and inside the front cover to alert those who may be tempted that it is forbidden to copy and they are taking a risk.

Data collection: This is the section for factual information gained through research or investigations. It should objectively describe the method of investigation, what was done and what was seen. This is strictly not the place for subjective assessments, judgements, interpretations or appraisals.

- **Site visit:** This sub-section should detail the timing of the site visit and any limiting factors that may have affected the level of data collection. The date of the visit, other parties present, limitations of access and weather conditions that affected visibility should be included under this heading.

- **Site description:** A brief site description is important because it confirms the location and demonstrates the author has visited the site and is aware of its setting in a wider context. Too

much unnecessary detail detracts from the flow of the text and should be avoided; too little may leave the author vulnerable to criticisms of insufficient depth. Ideally, the description of the site and its surroundings should sufficiently set the scene for a reader who has not been able to visit. It is also an opportunity to highlight particular factual points that have relevance later in the report.

- **Method of data collection:** Most reports involve some level of investigation that can range from superficial visual observations to detailed measurements and analysis. This sub-section should act as the contact point for the description of what the author did but it does not need to contain all the detail. If long descriptions are necessary, a summary should be included here with the full details listed in an appendix.

- **Summary of data:** A data summary can often be included in the method of data collection sub-section described above or, alternatively, it can have its own sub-section. The option chosen by the author should result in minimal disruption of the flow of the report text. A table with data for a single tree would be suitable for inclusion; a tree schedule with extensive data should be relegated to an appendix with only a brief summary in the text.

- **Summary of relevant reference information:** Where reference to a specific publication will help the full appraisal of a particular issue, it is often useful to summarise the relevant points before the appraisal. This prepares the reader with the necessary background to comprehend the basis and line of reasoning for the subjective discussions to follow. Each publication should have a separate paragraph within this section and the brief summary of the relevant points should accurately reflect the detail and spirit of the content. Again, this is information that the author should keep separate from the subjective appraisal that is to follow.

Appraisal: This is where authors use their experience to interpret all the objective information from observations, investigations and research listed in the previous sections. It is the place for the author's personal views, weightings, assessments and judgements; it is the meat of the report and the only real place for authors to stamp their authority. This section can be confusing so clearly reasoned logical arguments help the reader's comprehension. The author should systematically identify each issue and deal with it separately in its own headed

paragraph. Each issue should be analysed giving the pros and cons leading to a positive point. Issues that seem difficult to separate should be teased apart and cross-referenced to provide any necessary links.

Conclusions: In some report formats, for example management reports, conclusions may not be appropriate and it would only be necessary to include a recommendations section. Where conclusions are appropriate, if there is only one issue and the appraisal is relatively short, a separate section is the neatest way of dealing with it. Where the author has to appraise a number of issues, it may be more appropriate to include the conclusion for each issue at the end of the appraisal discussion and leave this section out altogether. Alternatively, a bulleted list of each conclusion as a summary in this section may be more effective. The author should base the final choice of format on how well it meets the reader's requirements. Irrespective of format, all conclusions should directly relate to issues that have been previously identified and appraised. It is essential that after preparing the conclusions, the brief is re-visited to make sure that it has been answered.

Recommendations: As for the conclusions section, recommendations may not be appropriate for some report formats and need not be included. If recommendations are appropriate, for most tree reports they are in the form of advised courses of action. The simplest and most effective way to produce recommendations is in the form of a tree schedule for a number of trees or as a bulleted list for an individual. If there are many recommendations, it may be more appropriate to include the detail in an appendix with a summary and reference in the text. If recommendations are appropriate, it is essential that they are clearly identifiable and not shrouded by the bulk of the report. Often, a bulleted or numbered list is the most effective means of achieving this end. Where the reader may have no knowledge of acceptable standards of work or how to find a suitable contractor, the provision of some specification guidance and professionally recognised sources of further information may be useful. Regular inspection by a qualified arboriculturist is an essential element of all tree management and the reader should always be reminded in this section.

Other considerations: Authors should use this optional section to highlight points that are not directly referred to in the brief but may have a direct bearing on the interpretation of the report. This is the appropriate place to advise how the report relates to statutory controls such as tree preservation orders or conservation areas. In some instances, it may be appropriate to mention dangerous trees that are strictly beyond the brief but may be of material importance to the situation. Clarifying issues of tree ownership and how that may affect the ability to implement works may also be useful in this section. Authors should include information here that will be helpful to the reader but does not fit neatly elsewhere in the report.

Bibliography, references and footnotes: Relevant publications that are referred to in the report or support the author's views should be acknowledged. For the occasional reference, it would be appropriate to include the full details at the point of mention, provided it does not interfere with the flow of the text. However, this can soon become disruptive to comprehension and the alternative of footnotes may be a better option. A footnote is a small marker in the text alerting the reader that further information is available without significantly interrupting the block of text. This marker is repeated at the bottom of the page with the relevant reference or comment for the reader to view at a convenient time. Footnotes create problems in report formats that use the footer area for the page details and can serve to confuse that part of the page. Alternatively, a bibliography at the end of the report may be a more appropriate option. This separate list of references has the advantages of reducing reader distractions and avoiding cluttering at page bottoms.

Sketch and scale plans: Location plans are a common feature of arboricultural reports and are often required in the main body to allow the full reference and comprehension of the text. All plans should include a key to the symbols and an indication of compass points. They should have an explanatory title and be placed as close as possible after their first reference in the text. There should also be a clear indication of whether the plan is either a sketch for illustrative purposes or accurate to scale.

Tables: Tables are the most effective way of presenting large amounts of information in the minimum amount of space. They dramatically reduce the amount of linking words between separate pieces of information and allow a much greater level of accessibility than solid blocks of text. Lines between columns and rows are of paramount importance; they guide the reader's eye and allow specific items of data to be pinpointed accurately and quickly. In terms of layout, short tables break up long blocks of text and add interesting focal points during reading (Figure 1a). However, extensive tables can disrupt the flow of a report and

interrupt the comprehension of the reader. Consequently, they should only be used in the main body of the report to present summaries or small parcels of related information. Long repetitive lists of data should be relegated to appendices and never included in the main text. All tables should be numbered and have an explanatory title. If they are used in the main text, they should be placed as close as possible after their first reference.

Appendices: All details that are not essential to the comprehension of the report should be included as appendices with a summary or reference in the text. Failure to observe this basic principle results in lengthy texts that are both difficult to read and understand. There need be no limit on the number or size of appendices. The following should always be included as appendices:

- **Qualifications and experience:** Authors with no qualifications and/or experience should not be writing reports. Every report should list the grounds on which the author is interpreting the information and forming the conclusions. With the exception of expert witness statements, there should only be a single sentence reference in the body of the report and the detail should be in an appendix. This appendix can be structured into the following four sections to make it easy for the reader to identify the important points. *1 - Qualifications:* Include all qualifications, dates acquired and membership of professional bodies. *2 - Experience:* Briefly list relevant employment history with appropriate descriptions of duties and dates. *3 - Continuing Professional Development (CPD):* A commitment to CPD is an important characteristic of professional practice and should be mentioned. This could include membership of professional committees, published papers, training courses attended or lecturing activities. *4 - Specific experience relevant to the report:* In some instances, it may be appropriate to expand upon experience that has resulted in an elevated level of expertise in a specific area relevant to the report content.

- **Tree schedule and explanatory notes:** The main function of a tree schedule is to present lengthy tree data in an abbreviated tabular form that is easy and quick to read. Lines should always separate the rows and columns. Information on more than one tree should always be included in the appendices, not the main text. Tree schedules should always have a following section of explanatory notes to inform the reader how the data was collected. It should clarify all the abbreviations used and provide all

the necessary detail to understand and use the tabular information.

- **Field forms:** The inclusion of hand written field notes or hand completed site forms as appendices is acceptable but they should not be included in the main body of the report. When included, they should always have accompanying explanatory notes to ensure that the reader can fully understand their significance.

- **Detailed explanations/calculations:** Detailed calculations or explanations tend to impede the flow of the report and are often unnecessary for full comprehension. This sort of detail is generally not appropriate for the main body of a report and should be included as an appendix with a reference in the text.

- **Copies of documents:** All photocopying should observe copyright regulations. Photocopied documents should be included as appendices and have a preceding summary sheet stating the number of photocopied pages with their origin.

Back cover: Back covers of reports are less prominent than the front and have a subtler potential because the front page restrictions in terms of minimal clutter do not apply so rigidly. This is the place to advertise those important details that all authors want to convey but will blur that crisp first impression needed at the front; the author's name, qualifications, contact details or services offered (Figure 3). There are still limits on the amount of information that can be included but a well-designed back cover can be a very effective promotional opportunity.

HONING YOUR WRITING SKILLS

Understanding basic principles is obviously important, but to be an effective author requires more subtle writing skills. Organising often abstract and unconnected ideas into a formal structure is an essential element of good communication. A standardised format as advocated in this paper is useful for the final construction of the report but can be restrictive in the initial planning stages. Mind mapping (Buzan, 1996) is a useful technique that allows the free expression necessary to cope with the unusual or unexpected. An author can then marshal these unrestrained ideas into the formal structure necessary for wider presentation.

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An author can speed up the writing of reports by fully utilising the power of computers. Commonly used standard phrases, sentences and even paragraphs can be incorporated into specific document templates making the ideal starting point for individual reports. Templates can be developed for all types of reports; mortgage, subsidence and development being some obvious arboricultural examples. Within the template, listing all the various options for a particular item accessed through pop up menus, further streamlines this process. These procedures will significantly reduce typing time but they will probably increase the editing time. They are worth considering if there is a net reduction in the time it takes to write the report. However, they should always be used with caution and it is not effective to apply them in every situation without due consideration.

In theory, an author could write every report to meet the criteria outlined in this paper with no errors. In practice, there are many constraints that make this goal difficult to achieve; tight deadlines, writers fatigue and third party inadequacies are some obvious examples. At the highest levels, proof reading skills can virtually eliminate errors (BPRO, 1995) but this approach is time consuming and often practically not possible for the everyday report. However, the following systematic self disciplined approach to checking can significantly reduce errors:-

1. Leave a time gap of at least an hour, and preferably a day, between writing the draft report and finally checking it.
2. Check the final draft from a printed document and not the computer screen.
3. Check the whole report from cover to cover and header to footer, no matter how familiar some parts may be.
4. Use a bright coloured pen and mark every change at the point in the text and with a line in the margin (See point 8 below).
5. Glance through the report looking at the layout, headings and numbering without reading the text. Check the spacing between blocks of text, the heading hierarchy, all footers and headers, and the numbering. They should all be consistent, logically ordered and look good.
6. Read the report concentrating on grammar, punctuation and spelling.
7. Read the report again concentrating on the accuracy of every fact against the reference documents. This should include dates, address details, all numbers, names of people/locations/things, directions and cross-references. Check everything, even the most obvious and frequently used template generated items. Tick each item on the printed copy once checked.
8. Read the report again and check that it does meet the requirements of the brief.
9. Insert any changes into the screen document crossing off each added change in the margin of the printed document. When completed, re-check all the margin marks to make sure that all the changes have been inserted. Keep the edited printed copy as a permanent paper record.
10. Get a colleague to read the completed report.
11. Glance through and read it one more time.

Errors can be expensive but, more importantly, they reduce professional credibility. Checking is a fundamental part of the report writing process and the author must specifically allocate time for it. Missing out any of the above steps will save time but it will also significantly increase the risks to the author's reputation.

Keeping up to date on developments within arboriculture is an important aspect of writing credible reports. However, producing good reports requires training in aspects remote from the basics of arboriculture. English grammar, visual presentation, business management, courtroom etiquette and computer skills are some obvious examples. Authors who wish to improve their level of skills must seek specialist training in these areas in addition to the obvious advances within their profession.

VISION FOR THE FUTURE

Quality assurance will be the most critical issue in the development of the Arboricultural Profession during the next decade. How the Profession manages this at a strategic level will dictate its speed of evolution and status in the wider world. Arboriculture's practical origins have resulted in blurred distinctions between the Industry and the Profession; these must be clarified. Formalising a separate consultancy career structure through the levels of 'student' to 'trainee arboriculturist' to 'consulting arboriculturist' to 'consultant' is the first step. Effective control of quality in practice at all these levels will deliver a strong, confident and respected Profession.

Report writing is an essential skill common to all levels of professional practice, but there is no formalised benchmark in arboriculture for the practising members. Adopting standardised formats for the range of arboricultural reporting is a fundamental requirement for effective quality

assurance. This would represent a significant advancement for the Arboricultural Profession.

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BIBLIOGRAPHY

Abeyta, D. (1995). *Guide to Report Writing for Consulting Arborists.* International Society of Arboriculture, Savoy, USA.

Bridgeman, P.H. (1976). *Tree Surgery: A Complete Guide.* David & Charles, London.

Bridgeman, P.H. (1995). *Arboricultural Association Review.* AA, Romsey.

Business & Professional Research Organisation Ltd (BPRO) (1995). *Successful editing and proofreading techniques.* BPRO, Newbury.

Buzan, T. (1996). *The Mindmap Book.* BBC Worldwide Publishing, London.

O'Callaghan Associates Ltd (1995). *Arboricultural Consultancy Workshop on Mortgage Reports* held in Lancashire. OCA, Liverpool.

Pryor, F. (1997). *Business Writing for Result*s Seminar held at Guildford. Pryor Resources, Inc., 200 Shawnee Mission Parkway, Shawnee Mission, Kansas 66205, USA.

The Academy of Experts (1995). *The Model Form of Expert's Report.* The Academy of Experts, London.

The Economist Books Ltd (1993). *The Economist Style Guide.* The Economist Books Ltd, London.

Woolf, Lord (1996). *Access to Justice.* HMSO.