

# **THESIS FORMATTING SIMPLIFIED, ILLUSTRATIONS (FIGURES, TABLES, ETC.)**

## **A Guide for Graduate Students**



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## CHECKLIST FOR STUDENTS COMPLETING THESES

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- Carefully read the Thesis Format Manual, **DO NOT** refer to theses in the library or department.
- Once thesis is complete, fill out the Format Approval Sheet and submit a complete final draft copy to the Graduate School. This sheet must be signed by your faculty advisor.
- If the thesis format is approved by the Graduate School, it will be forwarded to a reader in the Writing Place. You can schedule your defense after format approval.
- If thesis is **NOT** approved by the Graduate School, revise thesis and resubmit a complete final draft copy to the Graduate School. Once thesis is approved, schedule defense.
- Submit Notification of Oral Defense form and a copy of thesis abstract to the Graduate School 10 working days before oral defense is scheduled.
- Defend Thesis
- Have title page(s) signed by advisor and committee members.
- After defense, submit final copies of thesis to Graduate School.

## INTRODUCTION

The thesis culminates an important stage of your graduate career. In preparing and defending this document, you prove that you have acquired essential skills of research or scholarship as well as the ability to effectively communicate the results of your inquiry to the academic community.

To assist you and your advisory committee in this process, the Graduate School has prepared a two-part Thesis Format Manual, one that deals with basic formatting and another that deals with illustration preparation. Our goal is to help you produce a thesis that looks professional and makes the findings accessible to readers. We also hope that the thesis format recommended in this guide will facilitate publication of the work in a professional journal appropriate to the discipline.

Although this manual deals only with the preparation of illustrations, some organizational information from the other manual is reproduced. **IF YOU DO NOT PLAN TO INCLUDE ILLUSTRATIONS IN YOUR THESIS YOU DO NOT NEED TO READ THIS MANUAL.**

## ORGANIZATION AND REQUIREMENTS

The following organization and requirements apply to both hardcopies and electronic copies of theses and dissertations. Those specific requirements applicable only to the **ELECTRONIC COPY** are shown in **BOLD** below.

Theses are organized into three sections:

1. Preliminary matter (including title and approval pages, the table of contents, list of tables, etc.)
2. Text (introduction and chapters)
3. Back matter (including notes, references or bibliography, appendices, and biographical sketch).

The sequence in which these sections appear is as follows:

1. Preliminary matter:
2. Text - location of tables and figures
3. Back Matter - location of appendices

The graduate student and the advisory committee work together to determine what parts are to be included in the thesis. While some requirements apply to the entire text, others differ for these three sections and are described below. In the appendix are examples of each of the previous sections.

## ILLUSTRATIONS: GENERAL COMMENTS

The introduction of computer graphics for illustration has enhanced the ability of persons to prepare illustrations. Computer programs allow someone with little drafting ability to prepare high-quality illustrations. However, illustrations (Tables and Figures) must serve

the reader, support the text, and conform to standards in your field. Each figure and table must be on a separate page and not on the same page as the text. **Each table and figure follows its reference in the text.** Style guides often provide clear guidelines for the arrangement of data in tables or the creation of useful illustrative materials. Plan your tables and figures with these requirements in mind, remembering that margin requirements apply to every page of your text. Table titles and figure captions must be carefully coordinated with the List of Tables and List of Figures. Creating and maintaining these lists early in your work on the manuscript will help you control the numbering and progression of tables and figures. In addition, tables and figures can also be in color, but remember that it costs more to duplicate color than black and white. The following section answers common questions and resolves typical problems.

## Tables

"Good tables are essential to..." theses, reports or papers "...because some information is presented best in tabular form." Simple tables generally are more effective than complex ones. A table should deal with a single subject or bring together related information for comparison. Several small tables generally are better than one big one.

Table too wide for margins. Type it the length of the page (or use landscape printing). The title should appear along the left margin. The page number still appears as usual at the bottom of the page. See appendix for example.

Table too long for one page. Continue the table onto the next page, using usual margins. Don't repeat the title on the second (or subsequent) pages. Instead, center "Table ## cont." at the top of each succeeding page until the table is completed.

Oversized table. You have two options. Consider redesigning the table to fit the page or reapportioning the data between two tables. You may also reduce the table xerographically. If you opt for reduction, remember that table titles and page numbers must still be in the same typeface and size as the rest of the text. (Reduce the table itself, then paste up the page with the title and page number in normal type.) You may also place the table in a pocket in the rear of the thesis.

## Figures

Figures are diagrams, designs or patterns that provide illustration. Common figures include maps and cross-sections, graphs, photographs, drawings, etc. Text figures should be carefully planned to ensure the most effective communication possible. Illustrations serve to demonstrate relations that cannot be described as clearly by written word or to relate more detail than words can effectively portray. Figures can be in black and white or color, or mixed in a thesis. Remember that designing your illustrations early using the vertical and horizontal spatial dimensions of the page, minus the margins, will result in a better illustration. If you have trouble showing everything in portrait format, you can use landscape format. A single figure stands alone on a page, i.e., you are not allowed to mix two or more figures on the same page. In some cases this may result in figures only occupying small areas of individual pages and looking awkward. Sometimes, figures can

be combined on a single page and identified with different letters, such as a, b, c, and d. Below are answers to specific problems you may encounter in preparing figures.

Oversized figure. You may be able to redesign the figure to meet margin requirements. If you choose to reduce it xerographically, produce a caption and page number in normal size type. Extremely large illustrations, such as maps, may be folded and inserted in a pocket when the thesis is bound.

Multiple-image figure. Consider this as one figure, giving it a logical and inclusive common caption. You may label the components a), b), c), and so on, but do not use a combination of figure number and letter on the component itself (i.e., "3a") appearing on component a) of Figure 3. See example for the proper arrangement of such figures.

Facing-page caption. Some figures remain within margin requirements but leave no room for the caption. For such figures, create a facing-page caption. The figure appears on the right-hand page, and its caption appears to its left (see example). The front side of the caption page is blank. Margins on the caption page are reversed, so the wider margin is on the right, allowing for the binding (as you usually have allowed for it on the left). The page number appears centered at the bottom. The style of the caption should conform to your style guide or journal, just as your other captions do.

## **Photographs**

Photographs (photomicrographs) are black and white or color positive print images. They can be pictures of buildings, people, landscapes etc.; they are identified in the thesis as figures. Thus the rules for figures apply.

Photographs may be placed in the thesis in three different ways, dry-mounted originals that occur within the text, as entire pages on photographic paper or as color laser copies. The most important aspect that determines how best photographs are placed in the thesis is resolution. Each photograph must be treated as a figure -- given a number and caption -- and, like all figures, must meet margin requirements.

## **Multimedia, Sound, Video (Electronic Thesis Submittal Only)**

If you plan to submit parts of your thesis or dissertation in multimedia, sound or video formats, you should confer with the Graduate School for the procedures.

## **TABLE OF CONTENTS**

The Table of Contents of your thesis must contain the words List of Tables and List of Figures; however, individual tables and figures are not included here. In the preliminary matter section of the thesis, between the Acknowledgments or Dedication (if included) and the first page of the text (usually the Introduction), you must include a List of Tables and a List of Figures in that order. See below:

The preliminary matter consists of the:

Title Page

Journal Page  
Table of Contents  
Abstract  
Acknowledgments (optional)  
Dedication (optional)  
List of Tables  
List of Figures

Below are guidelines for their construction.

### **List of Tables and Figures**

Both lists follow essentially the same format, which resembles the Table of Contents. Again, the following samples provide a model that is easy to read and works well for any thesis.

- Margins: left 1.5"; top, right, and bottom 1"; **left, top, right, bottom 1"**
- Typeface and size: consistent with text
- No underlining, boldface, or italics (exception: names of species, genera, statistical abbreviations, or book titles may be underlined or italicized)
- Order: the List of Tables precedes the List of Figures
- Make entries for every table title and figure caption
- Entries must be consistent, both in style and in substance, with the titles and captions as they appear in the text (wording, capitalization, style of numerals, etc.)
- Abbreviation: you may abbreviate lengthy titles or captions, but do not paraphrase them; the entry must match the title or caption exactly up to the point where you abbreviate
- Length: either list may run to several pages; do not type "continued" at the top of second and subsequent pages

**Page number(s): number consecutively from the last page of the Acknowledgements or Dedication (if present), centering between the proper margins the Roman numerals ½ inch from the bottom of the page.**

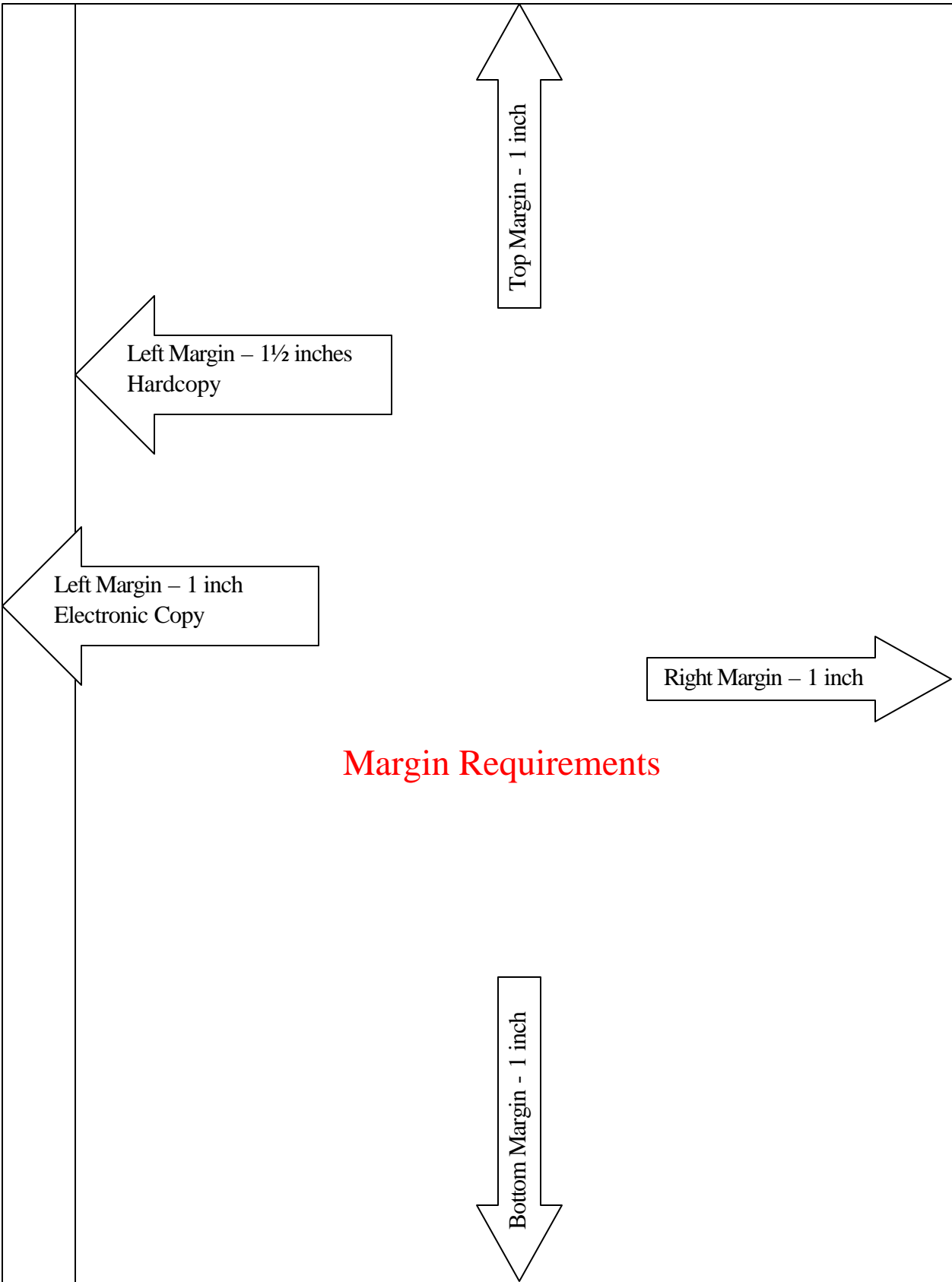
### **APPENDICES**

Discuss with your committee the need for appendices, carefully considering the value of the material you propose to include. How does the material relate to the rest of your text? Would it be more useful to readers somewhere within the text? Does including the material violate any copyright? Some material often included in appendices, such as computer printouts, may be so lengthy that placing it in the text would disrupt the reader's

comprehension of your material. Placing lengthy printouts, supplementary tables, examples of data collection sheets, or questionnaires in appendices makes sense.

To provide a clear break between appendices, designate each with a letter (Appendix A) and a title. The first page of the appendix is counted but not numbered. Subsequent pages are numbered as usual. Appendix is listed in the Table of Contents, but separate appendices are not listed. All material in the appendices must meet the usual margin requirements.

## **EXAMPLES**



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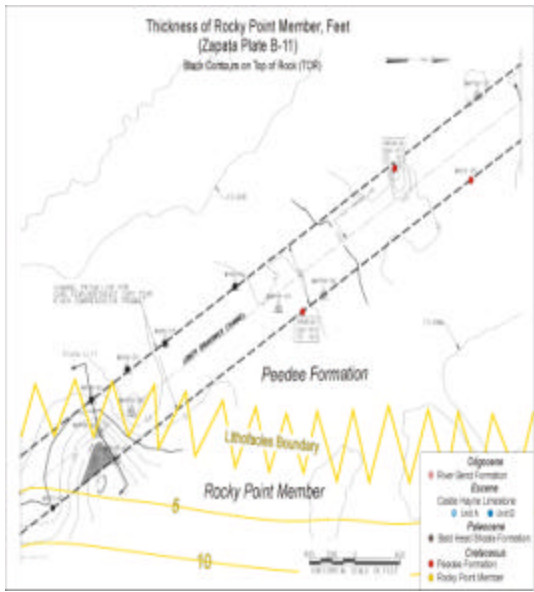
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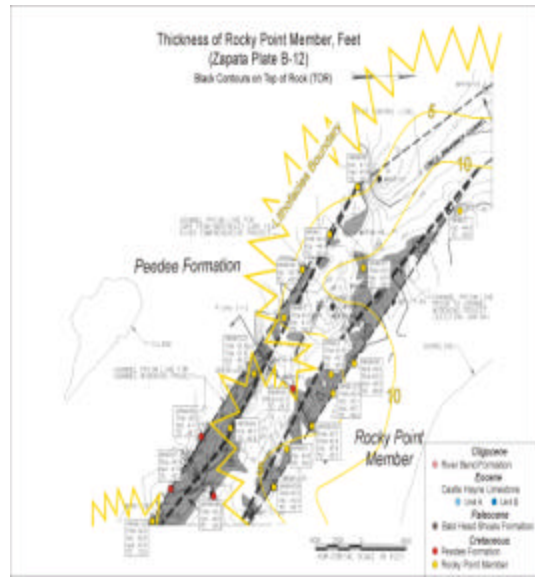
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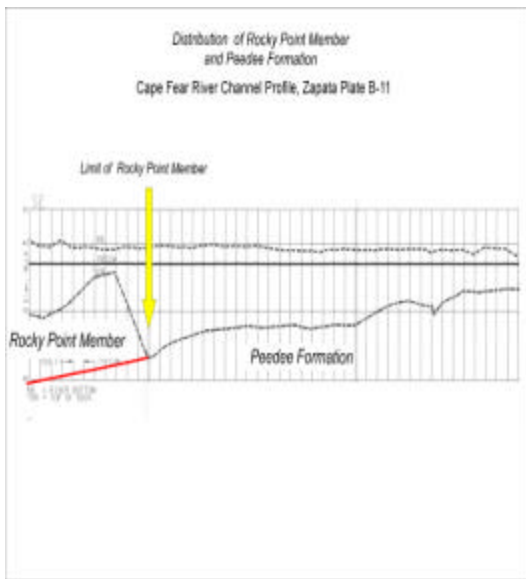
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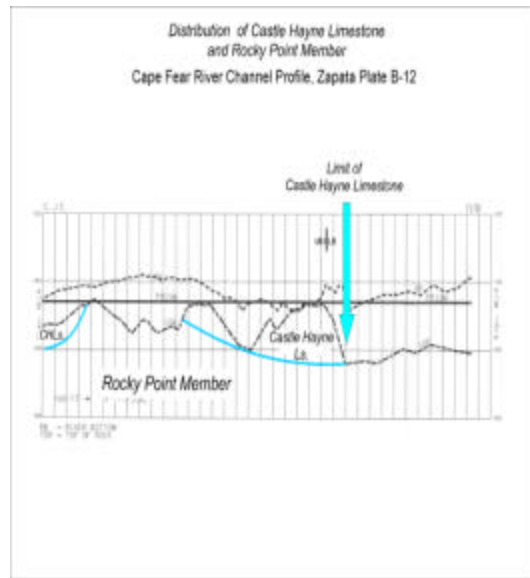
a.



b.



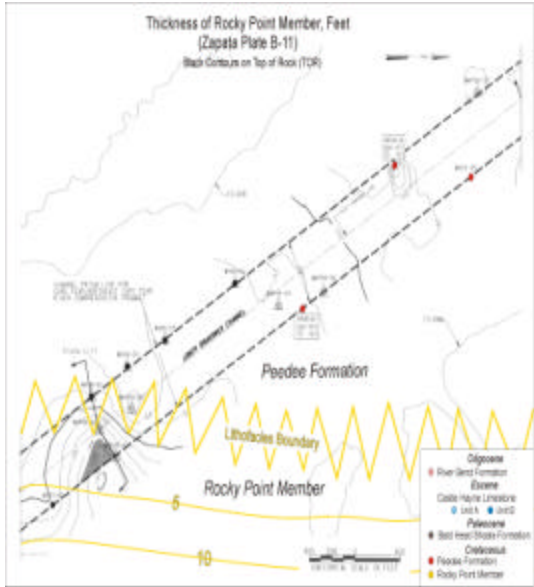
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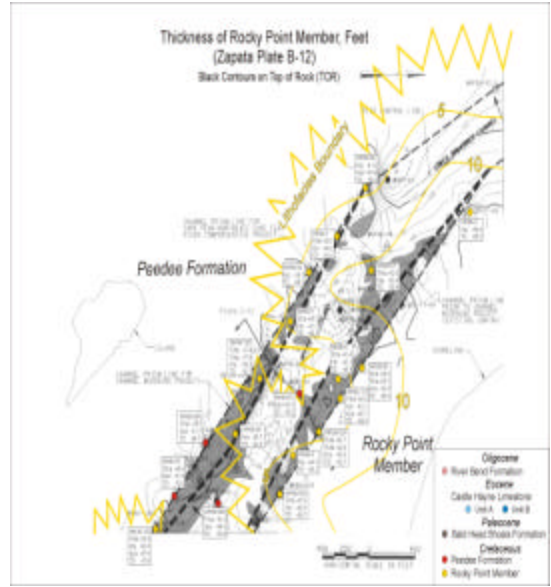
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Figure 1. a., b.) Thickness of Cretaceous Rocky Point Member, Anchorage Basin, Cape Fear River.  
c., d.) Cape Fear River Channel profiles.

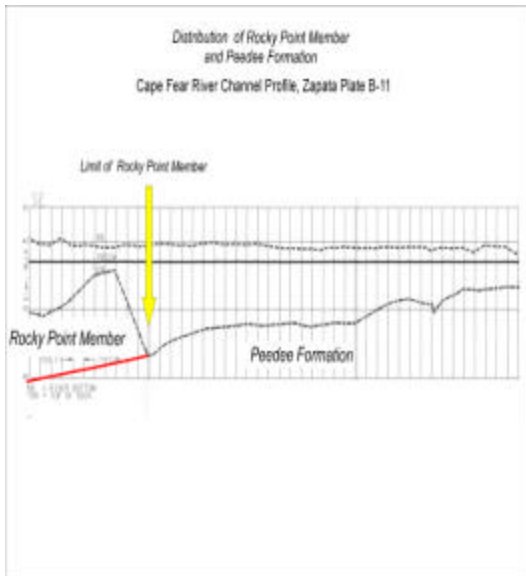
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c., d.) Cape Fear River Channel profiles.



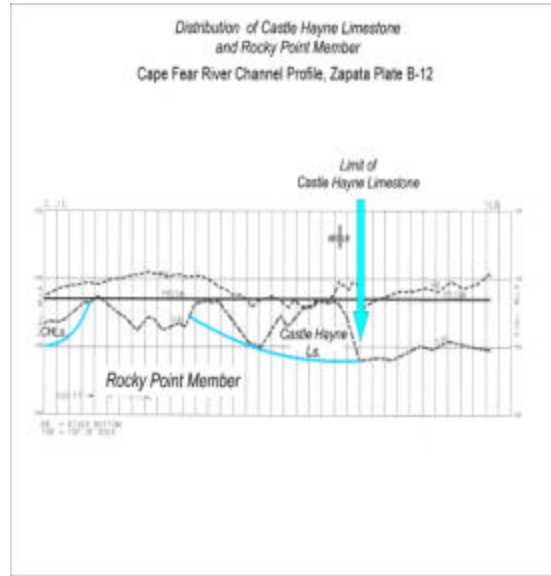
a.



b.



c.



d.

<b>SAMPLE</b>	<b>Quartz</b>	<b>Feldspar</b>	<b>Muscovite</b>	<b>Chlorite</b>	<b>Glaucony</b>	<b>Pyrite</b>	<b>Phosphorite</b>	<b>Other Detrital</b>	<b>Bioclasts</b>	<b>Dolomite</b>	<b>Micrite/Matrix</b>	<b>Porosity</b>
ICQ-KD1	27	1	<1	1	<1	2	<1		6	10	37	15
ICQ-KD2	29	1	<1	1	2	1	<1		4	16	35	12
RL314	23	1	<1	1	1	1	-		3	21	30	18
D86003	32	1	Tr	<1	1	1	-		-	23	27	16
H8528	19	1	Tr	<1	<1	1	-		Tr	35	26	19
H8527	10	<1	<1	Tr	<1	<1	-		-	53	13	23
95-IQ-5	24	1	Tr	1	<1	<1	-		-	26	20	27
95-IQ-4	23	2	Tr	Tr	1	1	-		-	35	21	17
95-IQ-3	24	2	Tr	1	1	1	<1		Tr	42	15	14
95-IQ-2	33	2	<1	<1	1	1	<1		-	30	14	17
97-HP-4	25	<1	Tr	1	1	<1	Tr		3	19	68	36
97-HP-3	28	2	<1	1	1	1	<1		10	8	55	22
97-HP-2	26	<1	<1	<1	2	1	Tr		13	<1	55	17
97-HP-1	29	<1	1	Tr	1	2	<1		5	2	51	20

Table 1. Sample numbers are referenced to location in Methods section of manuscript.

Table 2. Sample numbers are referenced to location in Methods section of manuscript.

<b>SAMPLE</b>	<b>Quartz</b>	<b>Feldspar</b>	<b>Muscovite</b>	<b>Chlorite</b>	<b>Glaucony</b>	<b>Pyrite</b>	<b>Phosphorite</b>	<b>Other Detrital</b>	<b>Bioclasts</b>	<b>Dolomite</b>	<b>Micrite/Matrix</b>	<b>Porosity</b>
ICQ-KD1	27	1	<1	1	<1	2	<1		6	10	37	15
ICQ-KD2	29	1	<1	1	2	1	<1		4	16	35	12
RL314	23	1	<1	1	1	1	-		3	21	30	18
D86003	32	1	Tr	<1	1	1	-		-	23	27	16
H8528	19	1	Tr	<1	<1	1	-		Tr	35	26	19
H8527	10	<1	<1	Tr	<1	<1	-		-	53	13	23
95-IQ-5	24	1	Tr	1	<1	<1	-		-	26	20	27
95-IQ-4	23	2	Tr	Tr	1	1	-		-	35	21	17
95-IQ-3	24	2	Tr	1	1	1	<1		Tr	42	15	14
95-IQ-2	33	2	<1	<1	1	1	<1		-	30	14	17
97-HP-4	25	<1	Tr	1	1	<1	Tr		3	19	68	36
97-HP-3	28	2	<1	1	1	1	<1		10	8	55	22
97-HP-2	26	<1	<1	<1	2	1	Tr		13	<1	55	17
97-HP-1	29	<1	1	Tr	1	2	<1		5	2	51	20

PROGRAM	1996			1997			1998			1999		
	Total Minority Applications	Total Minorities Accepted	Total Minorities Enrolled	Total Minority Applications	Total Minorities Accepted	Total Minorities Enrolled	Total Minority Applications	Total Minorities Accepted	Total Minorities Enrolled	Total Minority Applications	Total Minorities Accepted	Total Minorities Enrolled
<i>Business</i>												
MBA	24	10	8	17	8	7	13	3	3	11	7	6
MSAcg	5	3	3	9	5	4	9	5	4	9	6	6
<b>Subtotal</b>	<b>29</b>	<b>13</b>	<b>11</b>	<b>26</b>	<b>13</b>	<b>11</b>	<b>22</b>	<b>8</b>	<b>7</b>	<b>20</b>	<b>13</b>	<b>12</b>
<i>Education</i>												
MED	10	8	7	16	12	11	12	10	10	20	19	15
MSA	7	4	2	4	3	3	6	4	4	10	9	8
MAT	1	0	0	2	1	1	2	1	1	2	1	0
<b>Subtotal</b>	<b>18</b>	<b>12</b>	<b>9</b>	<b>22</b>	<b>16</b>	<b>15</b>	<b>20</b>	<b>15</b>	<b>15</b>	<b>32</b>	<b>29</b>	<b>23</b>
<i>Arts &amp; Sciences</i>												
BIO	4	1	0	4	1	0	3	1	0	1	1	1
CHEM	6	3	3	10	4	0	8	1	1	7	2	1
CRW	0	0	0	1	0	0	9	1	0	6	3	1
ENG	0	0	0	0	0	0	4	3	3	4	1	1
GRN										1	1	1
GLY	3	3	2	0	0	0	0	0	0	0	0	0
HST	0	0	0	2	1	0	2	0	0	4	3	1
LS										1	1	1
MATH	10	9	4	8	8	2	5	4	4	8	8	3
MMB	8	2	2	7	1	1	6	1	1	3	0	0
MS										2	1	0
PSY	5	1	0	5	1	0	8	1	1	9	1	0
<b>Subtotal</b>	<b>36</b>	<b>19</b>	<b>11</b>	<b>37</b>	<b>16</b>	<b>3</b>	<b>45</b>	<b>12</b>	<b>10</b>	<b>46</b>	<b>22</b>	<b>10</b>
<i>Nursing</i>												
NUR							5	2	2	5	2	1
<b>Subtotal</b>							<b>5</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>1</b>
<b>TOTAL</b>	<b>83</b>	<b>44</b>	<b>31</b>	<b>85</b>	<b>45</b>	<b>29</b>	<b>92</b>	<b>37</b>	<b>34</b>	<b>103</b>	<b>66</b>	<b>46</b>

Table 3. Minority Enrollment Patterns, 1996-1999.

## APPENDIX

### Appendix A. Procedure used to extract lipids from trout liver.

1. The tissue (1 g) was homogenized with methanol (10 ml) for 1 minute in a blender.
2. Chloroform (20 ml) was added and the homogenization continued for 2 minutes more.
3. The mixture was filtered, and the solid remaining was re-suspended in chloroform- methanol (2:1 by volume, 30 ml) and homogenized for 3 minutes.
4. The solid was filtered again and re-washed with fresh solvent.
5. The combined filtrates were transferred to a measuring cylinder, one fourth of the total volume of 0.88 % potassium chloride in water was added, and the mixture was shaken thoroughly before being allowed to settle.
6. The aqueous (upper) layer was drawn off by aspiration, one fourth of the volume of the lower layer of methanol-saline solution (1: 1, v/v) was added and the washing procedure was repeated.
7. The bottom layer containing the purified lipid was filtered before the solvent was removed on a rotary film evaporator.
8. The lipid was stored in a small volume of chloroform at -20 C until it was ready to be analyzed.

Appendix B. Variables used to construct a yearly maintenance energy budget.

<u>Month</u>	<u>Hours</u>	<u>Temp</u> <u>(°C)</u>	<u>MI O<sub>2</sub> g<sup>-1</sup> hr<sup>-1</sup></u>
May - August	15 inact	20	0.096
	9 act	30	0.345
September	16 inact	20	0.096
	8 act	30	0.345
October	16 inact	20	0.096
	8 act	30	0.240
November – April	16 inact	10	0.020
	8 act	30	0.240
December – March	20 inact	10	0.020
	4 act	30	0.240