Acknowledgements

There comes a time in any such thesis when one is permitted, albeit for a brief moment, to adopt the sort of frivolous tone which might arguably be suited to a broader spectrum of the scientific literature, if only to make its consumption more bearable. I would therefore like to extend the official dedication of this work in the appropriate fashion at this point, before the censors start messing around with the subsequent sections, and list in more detail all those people who made this work possible in one way or another. If anyone subsequently mentioned has any doubt as to the sincerity of my acknowledgement, I can only say that they ought to know me better than that!

As is customary in such a work, I would at this point like to thank Prof. Dr. Klaus Becker for placing such a large amount of faith in an overaged drop-out with a track record as colourful as mine and accepting me as his Ph.D. student. Further thanks go to Dr. Ulfert Focken for the direct supervision of this effort and for laying the groundwork for the write-up with his comments to all the publications prepared from it. I am, however, sure that they would have stumbled across a quite different candidate if Prof. Dr. Walter Nellen, in keeping with the common departmental policy, had channelled my application and CV into that familiar round object on the floor instead of passing it on to them. As the list of referees shows, his contribution to this work has been acknowledged by giving him the dubious pleasure of reading it before it is inflicted on the general public.

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A project doing so much for population control in Laguna de Bay fishpens and -cages would not have been possible without the wholehearted cooperation of those people who normally make a living growing fish for a more conventional form of ultimate consumption. I would therefore like to thank Messrs. Joseng Montevillas, Chris Manlapaz, Tiboy Reyes and Boyet Flores for permitting stock reductions of more or less drastic proportions at their aquaculture operations. I should also mention those members of their staff who were kept awake for most of the night by our sampling antics, sometimes taking an active part in the massacre, but I never got to know them by name so that they have to share a general acknowledgement.

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List of Abbreviations

SI Units

°/o	percent
°/oo	per thousand
µm	micrometre
°C	degrees Centigrade
C°	Centigrade degrees (difference between two temperatures)
cm	centimetre
g	gramme
h	hour
ha	hectare
km	kilometre
km^2	square kilometre
l	litre
m	metre
m^2	square metre
min	minute
m*l*	millilitre
mm	millimetre
mm Hg	millimetres of mercury (gas pressure)
nm	nanometre
kg	kilogramme
t	tonne
y	year

Mathematical terms

∞	infinity
ANOVA	analysis of variance
b	regression coefficient
CC	correlation coefficient
Cov	covariance
df	degrees of freedom
e	Euler's number, base of the *logarithmus naturalis*
ln	natural logarithm
p	probability level
r	correlation coefficient
r^2	coefficient of determination (regression)
SE_b	standard error of the regression coefficient *b*
SSR	sum of squared residuals
St. Dev.	standard deviation
Var	variance

General

° 'E	degrees and minutes eastern longitude
° 'N	degrees and minutes northern latitude
° 'S	degrees and minutes southern latitude
° 'W	degrees and minutes western longitude
% BME	Percent Body Mass Equivalent
ß	power quotient for stomach content *S*
A	Average Stomach Contents over analytical period (Bajkov model)
AlcWC	Alcohol preserved Weight of the Stomach Contents
AlcWI	Alcohol preserved Weight of the Intestinal Tract
App.	Appendix
B	condition factor after Jones *et al*. (1999)
B'	condition factor after Richter *et al*. (2000)
C_t	food consumption over time *t* (Elliott-Persson model)
cf.	compare (from latin *confer*)
Chl-a	Chlorophyll-a
cont.	continued
D	Food Consumption over 24 hour period (Bajkov model)
E	Instantaneous Stomach Evacuation Rate
e.g.	for example (from latin *exempli gratia*)
Eqn.	Equation
et al.	and coworkers (from latin *et alii*: and others)
Fig.	Figure
$f_i(t)$	mathematical evacuation function of food type *i* (Olson-Mullen model)
FrWC	Fresh Weight of the Stomach Contents
FrWI	Fresh Weight of the Intestinal Tract
g	Growth Rate
G_0	Initial Growth Rate
gC	gramme Carbon
GW	Gutted Body Weight
H	Body Height
ICLARM	International Council for Living Aquatic Resource Management
i.e.	that is to say (from latin *id est*)
J_1	Ingestion Rate
J_2	Instantaneous Ingestion Rate
k	rate constant
K	condition factor after Fulton (1911)
K'	condition factor after Ricker (1975)
kJ	kilojoule
L	Body Length
L.	Linnaeus
LLDA	Laguna Lake Development Authority
MGA	Manufacturer's Guaranteed Analysis
MGR	Metabolic Growth Rate
$M(i)_{avg}$	Average Weight of items of food type *i* when ingested (Olson-Mullen model)
n	number of hours taken to evacuate stomach fully (Bajkov model)
NFE	Nitrogen-free Extract

NHCS	Napindan Hydraulic Control Structure
P_c	critical oxygen partial pressure (for fish)
pers. comm.	personal communication
PIOM	Particulate Inorganic Matter
POM	Particulate Organic Matter
PVC	Polyvinylchloride
R_d	Daily Ration
S	Stomach Contents
S_∞	Actual (asymptotic) Maximum Stomach Contents at which ingestion equals evacuation
S_{avg}	Average Stomach Contents over analytical period
S_f	Stomach Contents at the start of a non-feeding phase
S_m	Theoretical Maximum Stomach Contents at which ingestion is zero
S_r	Residual Stomach Contents at the start of a feeding phase
S_t	Stomach Contents at time *t*
SEAFDEC AQD	Aquaculture Department, Southeast Asian Fisheries Development Center
SGR	Specific Growth Rate
SL	Standard Body Length
SOGREAH	Société Grenobloise d'Etudes et d'Applications Hydrauliques
SR	Spectrophotometric Reading
t	Time
t_0	Initial Time
$T(i)_{avg}$	Average Time Interval between ingestion of individual items of food type *i* (Olson-Mullen model)
T_f	Time at start of a non-feeding phase in MAXIMS model
T_r	Time at start of a feeding phase in MAXIMS model
Tab.	Table
TW	Total Body Weight
V	Volume of Water Sample (spectrophotometry)
v	Volume of Extractant (spectrophotometry)
W	Body Weight
W_0	Initial Body Weight
W_t	Body Weight at time *t*
$W(i)_{avg}$	Average Weight of food type *i* in the stomach over a sampling period (Olson-Mullen model)

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