

CONTENTS

	PAGE
VIDELER, J. J., WEIHS, D. AND DAAN, S. Intermittent gliding in the hunting flight of the kestrel, <i>Falco tinnunculus</i> L.	1
GOLDRING, JAMES M., KATER, JOANNE W. AND KATER, STANLEY B. Electrophysiological and morphological identification of action potential generating secretory cell types isolated from the salivary gland of <i>Ariolimax</i>	13
COHAN, CHRISTOPHER S. AND MPITSOS, GEORGE J. The generation of rhythmic activity in a distributed motor system	25
COHAN, CHRISTOPHER S. AND MPITSOS, GEORGE J. Selective recruitment of interganglionic interneurons during different motor patterns in <i>Pleurobranchaea</i>	43
PASZTOR, V. M. AND CLARAC, F. An analysis of waving behaviour: an alternative motor programme for the thoracic appendages of decapod crustacea	59
COYER, PHILIP E., HALSEY, JAMES H., JR. AND STRONG, EDWARD R. Reversible changes in the intracellular potassium ion activities and membrane potentials of <i>Aplysia</i> L ₂ -L ₆ neurones in response to normoxia and hypoxia	79
EGELHAAF, M. AND BENJAMIN, P. R. Coupled neuronal oscillators in the snail <i>Lymnaea stagnalis</i> : endogenous cellular properties and network interactions.	93
WEBB, P. W. Speed, acceleration and manoeuvrability of two teleost fishes	115
MCDONALD, D. G. The interaction of environmental calcium and low pH on the physiology of the rainbow trout, <i>Salmo gairdneri</i> I. Branchial and renal net ion and H ⁺ fluxes	123
MCDONALD, D. G., WALKER, R. L. AND WILKES, P. R. H. The interaction of environmental calcium and low pH on the physiology of the rainbow trout, <i>Salmo gairdneri</i> . II. Branchial ionoregulatory mechanisms	141
GRAHAM, JEFFREY B. The transition to air breathing in fishes. II. Effects of hypoxia acclimation on the bimodal gas exchange of <i>Ancistrus chagresi</i> (Lorocariidae)	157
CRUSE, H. AND SCHMITZ, J. The control system of the femur-tibia joint in the standing leg of a walking stick insect <i>Carausius morosus</i>	175
FISCHER, LUDWIG AND FLOREY, ERNST. Modulation of synaptic transmission and excitation-contraction coupling in the opener muscle of the crayfish, <i>Astacus leptodactylus</i> , by 5-hydroxytryptamine and octopamine.	187
WOLFERSBERGER, MICHAEL G. AND GIANGIACOMO, KATHLEEN M. Active potassium transport by the isolated lepidopteran larval midgut: stimulation of net potassium flux and elimination of the slower phase decline of the short-circuit current	199
GARETTO, L. P. AND ARMSTRONG, R. B. Influence of circadian rhythms on rat muscle glycogen metabolism during and after exercise.	211
RUSSELL, I. J. AND LOWE, D. A. The effect of efferent stimulation on the phase and amplitude of extracellular receptor potentials in the lateral line system of the perch (<i>Perca fluviatilis</i>)	223

RIND, F. CLAIRE. The organization of flight motoneurons in the moth, <i>Manduca sexta</i>	239
RIND, F. CLAIRE. A directionally sensitive motion detecting neurone in the brain of a moth.	253
RIND, F. CLAIRE. The role of an identified brain neurone in mediating optomotor movements in a moth	273
SAUBERT, C. W, IV AND ARMSTRONG, R. B. Hormonal influence on diurnal glycogen rhythms in rat skeletal muscles	285
BELL, M. V., KELLY, K. F. AND SARGENT, J. R. The transport of orthovanadate and similar oxyanions in relation to salt and water transport across the isolated intestine of the common eel, <i>Anguilla anguilla</i>	295
PENNYCUK, C. J. Thermal soaring compared in three dissimilar tropical bird species, <i>Fregata magnificens</i> , <i>Pelecanus occidentalis</i> and <i>Coragyps atratus</i>	307
PETTERSSON, KNUT. Adrenergic control of oxygen transfer in perfused gills of the cod, <i>Gadus morhua</i>	327

SHORT COMMUNICATIONS

CRESPO, SILVIA AND KARNAKY, KARL J., JR. Copper and zinc inhibit chloride transport across the opercular epithelium of seawater-adapted killifish <i>Fundus heteroclitus</i>	337
EDWARDS, H. A. Electrophysiology of mosquito anal papillae	343
BOGGS, DONA F. AND BIRCHARD, GEOFFREY F. Relationship between haemoglobin O ₂ affinity and the ventilatory response to hypoxia in the rhea and pheasant	347