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# CONSERVATION BIOLOGY OF COBITID FISH *LEPIDOCEPHALUS GUNTEA* (HAMILTON-BUCHANAN): LENGTH-WEIGHT RELATIONSHIP AS HEALTH INDICATOR

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### ABSTRACT

Present study is conducted as a part of research project on the conservation biology of a less populated species *Lepidocephalus guntea*. Length-weight relationship and relative condition factor were used as health indicators. It was concluded that higher values of regression coefficient (2.174) and RCF (>1.0) indicated a good health of fish in Mandal river.

Key words- Conservation, Lepidocephalus, Length-weight relationship, RCF.

#### REFERENCES

- Bahuguna, P., Kumar, R., Verma, R. and Bhatia, D.K., Verma, R., Joshi, H.K., Balodi, V.P. and Kotnala, C.B. (2010). Body Mass-Length Relationship and Relative condition factor of a fresh water sucker head Gadale, *Garra lamta* (Ham.-Buch.) from Kumaun hills, Uttarakhand, India. *The Ecologia*. Vol. 10 (1-2): 41-48.
- Bali, R.K. and Sharma, K.B. (2002). Length weight relationship and relative condition factor of *Tor putitora* (Hamilton) inhabiting Beas river in District Kangra. *NATCON* Publication-7 :195-202.
- Frost, W.E. (1945). The age and growth of eels (Anguilla anguilla) from the Windermere catchment area. J. Anim. Ecol. 14: 106-124.
- Hile, R. (1936). Age and growth of the Cisco, *Leucichthys artedt* (Le Seum) in the North-Eastern high lands. Wisconsin Bull. U.S. Bur. Fish. 48 : 211-317.

Kumar, K., Bisht, K.L., Dobriyal, A.K., Bahuguna, P.K., Joshi, H.K., and Goswami, S. (2006). Length weight relationship and condition factor in a hill stream fish *Botia dayi* Hora from Uttaranchal. *Journal of Mountain Research*, 1: 73-80.

Le Cren, E. D. (1951). The length- weight relationship and seasonal cycle in gonad weight and condition in Perch (*Perca fluviatilus*). J. Anim. Ecol. 20 : 201-219.

- Mahmood, K., Ayub, Z., Moazzam, M. and Siddiqui, G.(2012). Length-weight relationship and condition factor in *Ilisha melastoma* (Clupeiformes: Pristigasteridae ) Off Pakistan. *Pak.J. Zool.* Vol. 44(1):71-77.
- Martin, W.R. (1949). The mechanics of environmental control of body form in fishes. Univ. Toronto Stud. Biol. 58 : (Publ. Ont. Fish. Res. Lab. ) 70:1–91.
- Misra, M. (1982).Studies on fishery biology of *Schizothorax richardsonii* (Gray), an economically important food fish of Garhwal Himalaya. D. Phil. Thesis. submitted to University of Garhwal, Srinagar Garhwal.
- Nautiyal, P. (1985). Length- weight relationship and relative condition factor of the Garhwal Himlayan mahseer with reference to its fishery. Indian J. Anim. Sci. 55(1): 65 70.
- Pervin, M.R. and Mortuza, M. G. (2008). Notes on length-weight relationship and condition factor of freshwater fish, *Labeo boga* (Hamilton) (Cypriniformes: Cyprinidae). *Univ. J. Zool. Rajshahi Univ.*, 27: 97-98.
- Pokhriyal, R.C. (1986). Fishery biology of *C. latius latius* from Alaknanda, Garhwal Himalaya. D. Phil. Thesis, HNB Garhwal University, Srinagar Garhwal.
- Sarojini, K.K. (1957). Biology and Fisheries of the grey mullets of Bengal. I. Biology of *Mugil parsia* (Ham.) with notes on its fishing in Bengal. Indian J. Fish. 4 : 160- 207.
- Thapliyal, A. (2002). Some aspects of fish biology of *Pseudecheneis sulcatus* (McClelland) from Garhwal Himalaya, Uttaranchal. D.Phil. Thesis, HNB Garhwal University, Srinagar Garhwal.
- Uniyal, S.P., Dobriyal, A.K., Bisht, M.S., Balodi, V.P., Joshi, H.K., Singh, R., Thapliyal, A.,
  Phurailatpam, S., Kukrety, M., Sandhya and Pankaj. 2004. Length-weight relationship and
  relative condition factor in *Tor chilinoides* (Pisces:Cyprinidae) from Garhwal Himalaya.
  *Uttar Pradesh J. Zool.* 24(3): 217-222