

南海中西沙海域两种灯光捕捞作业比较研究

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摘要: 根据 2008 年对南海中西沙海域 16 艘灯光罩网船和 26 艘灯光围网船抽样调查数据, 对两种作业方式进行了比较研究。结果表明: 受冷冬大风及休渔时间的影响, 2008 年两种捕捞方式在中西沙海域的作业时间为 2 月~5 月, 渔汛主要是 4-5 月份, 作业渔船主机功率多为 220kw 以上; 灯光罩网作业范围分布较广, 水上集鱼灯 120~200 盏 (1kw/pc), 渔获产量依次为柔鱼 (*Ommastrephes bartrami* Lesueur)、蓝圆鲹 (*Decapterus maruadsi* Temminck et Shlegel)、颌圆鲹 (*Decapterus lajang* Bleeker)、扁舵鲹 (*Auxis thazard* Lacépède)、黄鳍金枪鱼 (*Thunnus albacore* Lowe) 和巴鲐 (*Euthynnus affinis* Cantor) 等; 灯光围网船作业范围集中在中沙海域, 水上集鱼灯 160~300 盏 (1kw/pc), 渔获产量依次为颌圆鲹、蓝圆鲹、扁舵鲹、羽鳃鲐 (*Rastrelliger kanagurta* Cuvier)、巴鲐、大眼金枪鱼 (*Thunnus obesus* Lowe)、柔鱼、大甲鲹 (*Megalapis cordyla* Linnaeus)、长体圆鲹 (*Decapterus macrosoma* Bleeker)、丽叶鲹 (*Caranx kalla* Cuvier et Valenciennes)、珍鲹 (*Caranx ignobilis* Forskål) 和鲐 (*Pneumatophorus japonicus* Houttuyn) 等。分渔区单位捕捞努力量渔获量 (CPUE) 统计结果显示: 灯光罩网中心渔区为 643、624、625、567、641 等海域, CPUE 分别为 0.613kg/kw•net、0.430 kg/kw•net、0.390 kg/kw•net、0.276 kg/kw•net 和 0.270 kg/kw•net; 灯光围网中心渔区为 608、642、626、643、625、624 和 607 海域, CPUE 分别为 5.011kg/kw•net、3.990kg/kw•net、1.353 kg/kw•net、1.153kg/kw•net、0.696 kg/kw•net、0.406 kg/kw•net 和 0.401 kg/kw•net。本文对两种作业方式的经济效益也进行了比较分析, 并提出对南海中西沙海域进行灯光捕捞作业的管理建议。

关键词: 南海, 中西沙海域, 灯光罩网, 灯光围网, 渔业资源

Comparative Study on two light attracting commercial fishing methods around Zhongsha and Xisha Islands sea areas, South China Sea

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Abstract: Based on survey statistical data of 16 light attracting falling net vessels and 26 light attracting purse seiners fishing in Zhongsha and Xisha Islands, South China Sea, these two fishing methods are compared in many aspects. Results showed that because of special cold winter and the closing time of South China Sea, both of the fishing in Zhongsha and Xisha Islands were from February to May, especially in April and May. A great number of the vessels equipped with main engines more than 220 kw. Fishing ground for the Light attracting falling net vessels, with 120~200 pieces of 1 kw fish attracting lamps, expanded in a large sea areas. Main species of them in turn by catch are *Ommastrephes bartrami* (Lesueur), *Decapterus maruadsi* (Temminck et Shlegel), *Decapterus lajang* (Bleeker), *Auxis thazard* (Lacépède), *Thunnus albacore* (Lowe) and *Euthynnus affinis* (Cantor) et al. While most of the light purse seiners, with 160~300 pieces of 1 kw fish attracting lamps, fished in Zhongsha Islands sea areas. The catch species in turn are *Decapterus lajang* (Bleeker),

Keywords: Zhongsha Islands; Xisha Islands; South China Sea; light attracting falling net; light attracting purse seiner; fisheries resources