

## Seafood Banquets in Beijing: Consumer Perspectives and Implications for Environmental Sustainability

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### Abstract

Understanding the social drivers of increased seafood consumption in China, such as consumer perspectives in banquets, will be crucial if practical strategies to introduce sustainability into this market are to be successfully implemented. Based on 34 semi-structured interviews with key informants including seafood restaurant operators, seafood consumers and seafood traders, this study investigated seafood consumer attitudes and behaviours in Beijing seafood restaurants. The results and discussion is divided into sections that address the popularity and reasons behind the popularity of: 1) seafood banquets in general; 2) fish at banquets; 3) other forms of seafood at banquets; and 4) preferred characteristics and qualities of seafood at banquets. The consumption of certain types of seafood such as live reef fish and sea cucumber is becoming increasingly popular, while the consumption of shark fin is decreasing in popularity. Awareness and concern about sustainability and traceability issues were relatively low, and more significant themes for understanding consumer preferences about seafood include social status and prestige, food safety and quality, and health and nutrition. The paper concludes by demonstrating the implications for market-based interventions and government regulation.

**Keywords:** China, consumption, markets, fisheries, banquets, seafood

### INTRODUCTION

The rapid pace of development in the Chinese economy has also seen a significant increase in rates of consumption of natural resources, with important implications for the global economy and environment (Liu and Raven 2010; Mol 2011). Relatively less attention has been paid to the effects of increased Chinese demand for marine resources such as seafood (but see Clarke et al. 2007; Hanson et al. 2011; Fabinyi 2012). Chinese per capita consumption of seafood has been increasing steadily over the past few decades (FAOSTAT 2012; Zhou et al. 2012), and much of

this seafood is imported from other countries. This expanded seafood market presents important opportunities for source countries, but also raises concerns over environmental sustainability.

In general, seafood markets appear to be one of the primary drivers of marine ecosystem change and fisheries stock declines at both local and global scales (Jackson et al. 2001; Pauly et al. 2002; Brewer et al. 2012; Cinner et al. 2013). Specifically, Chinese consumption of much imported seafood is a direct driver of stock declines for some species throughout the Asia-Pacific, and China is the largest market for a number of significant types of seafood linked to overfishing, such as live reef fish, sea cucumbers and shark fin (Fabinyi 2012; Table 1). In many cases, the strength of the market demand from China overwhelms any local institutions for sustainability that may exist in source countries (Berkes et al. 2006; Fabinyi 2012). How the Chinese seafood market develops in years to come is an issue that will have great implications for the livelihoods and environments of source countries throughout the world, and future global stocks of marine resources (Hanson et al. 2011; Cinner et al. 2013).

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**Table 1**  
**Commonly consumed seafood, prices, and wild source status: Beijing seafood restaurants April-July 2012**

Common name (Pinyin)	Common name (English)	Scientific name/group	Price per standard measure in CNY	Price per kg in USD (1 USD= 6.3 CNY) <sup>a</sup>	Wild source status
<i>Yuchi</i>	Shark fin	Elasmobranchii	Most common types at 260-400/0.1kg; up to 1000/0.1kg	Most common types at 410-630/kg; up to 1580/kg	Variable for individual species. However, globally considered to be in decline: 32% of pelagic sharks and rays considered 'threatened' (Camhi et al. 2009; see also Dulvy et al. 2008). Hong Kong handles 30–50% of shark fin trade; entrepôt for mainland China (Clarke 2008).
<i>Haishen</i>	Sea cucumber	Holothuridae	Usually 1-300 per person (one or two per person); up to 1000 per person.	Usually 16-47 per person; price per kg unrecorded	Variable for individual species. However, globally, 20% of sea cucumber fisheries are depleted and 38% are over-exploited – this is particularly the case for the Indo-Pacific (Purcell et al. 2013). <sup>b</sup>
<i>Sumei</i>	Napoleon wrasse	<i>Cheilinus undulatus</i>	800-2000/0.5kg	254-632	Listed as endangered in International Union for the Conservation of Nature (IUCN) Red List (Russell 2004). Severe population declines directly attributed to trade (Scales et al. 2007). Listed in Appendix II of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
<i>Laoshuban</i>	Mouse grouper	<i>Cromileptes altiveles</i>	700-1500/0.5kg	222-474	Listed as threatened in the IUCN Red List (Sadovy et al. 2008).
<i>Dongxingban</i>	Leopard coral grouper	<i>Plectropomus leopardus</i>	500-1000/0.5kg	158-316	Catch, abundance, and mean size declining in some areas; listed as near-threatened on IUCN Red List (Cornish & Kiwi 2004).
<i>Aozhou longxia</i>	Australian lobster	<i>Palinuridae</i>	500-800/0.5kg	158-254	The two species ( <i>Panulirus cygnus</i> and <i>Jasus edwardsii</i> ) that comprise 'Australian lobster' both classified as least threatened on IUCN Red List (Butler et al. 2011; MacDiarmid et al. 2011).
<i>Xiangbabang</i>	Geoduck	<i>Panopea generosa</i>	360-600/0.5kg	114-190	Unassessed in IUCN Red List.
<i>Baoyu</i>	Abalone	Haliotidae	Highly variable; imported abalone from Australia and Japan 300-600/0.5kg	Highly variable; imported abalone from Australia and Japan 94-190	Variable for individual species.
<i>Hetun</i>	Pufferfish	Tetraodontidae	388-500/0.5kg	122-158	Variable for individual species.
<i>Shibanyu</i>	Grouper	Serranidae	170-400/0.5kg	54-126	Variable for individual species.
<i>Jinqiangyu</i>	Tuna	Thunnini	130/0.5kg	41	Variable for individual species.
<i>Sanwenyu</i>	Salmon	Salmonidae	70/0.5kg	22	Variable for individual species.
<i>Duobaoyu</i>	Turbot	Scophthalmidae	100-200/0.5kg	32-64	Unassessed in IUCN Red List.

Sources: Fieldwork data for columns 1-5.

For column 6, IUCN Red List database consulted for status ([www.iucnredlist.org](http://www.iucnredlist.org)) and additional references listed for sharks, sea cucumbers, and Napoleon wrasse.

Notes: a. Exchange rates during the time of fieldwork (approximate).

b. Most of the sea cucumber consumed in Beijing is *Apostichopus japonicus*, which is also farmed intensively (Chen 2004). A wider variety of sea cucumbers are commonly consumed in southern China and Hong Kong (To and Shea 2012).

Seafood markets, like any other market, have different characteristics in different places (Swartz et al. 2010; Villasante et al. 2012). This paper aims to highlight the utility of an approach to understand the Chinese seafood market that focusses on its social context. Specific factors driving the consumption of particular types of seafood vary according to different social contexts, and these contexts must be understood in order to implement practical and grounded strategies to address the sustainability of these markets (cf. Drury 2011). This is a point that has been taken for granted in the business world, and has had less impact in conservation work. Gaining a greater understanding of the particular characteristics of the Chinese seafood market will be an important component of strategies to fully integrate sustainability concerns into this market.

In a wide-ranging review of global food consumption, Kearney (2010) identifies a number of major drivers of food consumption trends. Some of the more significant drivers include income, urbanisation, trade liberalisation, transnational food corporations, retailing, food industry marketing, and consumer attitudes and behaviour (see also Erickson 2008). In China, many of these drivers are clearly a large part of changing consumption trends (French and Crabbe 2010). A recent report, for example, highlighted the role of rising incomes and urbanisation as the most significant drivers of food consumption trends in contemporary China (Zhou et al. 2012: vii). However, the ways in which such drivers interact to influence the Chinese seafood market remains relatively poorly understood. This is in large part because of the lack

of reliable and disaggregated quantitative data in the fisheries and seafood sector (Watson and Pauly 2001; Clarke 2009).

In this paper, we focus on consumer ‘perspectives’ (defined for the purposes of this paper as attitudes and behaviour) related to seafood consumption in banquets, an important location for so-called ‘luxury’, imported seafood consumption. Many signature seafood dishes consumed in these banquets are from unsustainably harvested stocks (Fabinyi 2012; Table 1). Understanding consumer perspectives in these banquets is important for several reasons. As Kearney has detailed (2010), consumer attitudes are one of the key drivers of trends in food consumption. A wide range of ethnographic and other social science research has shown that these consumer choices are not simply ‘economic’ choices that can be reduced to the relative level of disposable income: instead, they are embedded within a vast range of broader historical, social and cultural processes (Fine 2002; Wilk 2002; Wu and Cheung 2002; Croll 2006; Fabinyi 2012). If policymakers wish to address the choices made by Chinese seafood consumers, they will need to understand the reasons behind these choices, and the social context of banquets in which these choices are enacted.

However, targeting seafood consumers to improve seafood sustainability such as through certification schemes and consumer awareness campaigns has been critiqued on a number of grounds, including: problems with consumer confusion and traceability; mislabelling; difficulties in defining ‘sustainable’ fisheries; and a lack of clarity about the level of benefits for the environment (Jacquet et al. 2010; Ponte 2012). This has led to the advocacy of other sustainability interventions, such as direct government regulation, or market-based approaches that target other stakeholders (e.g., seafood businesses) (Jacquet et al. 2010). While many of these criticisms are well-founded, we accept that such consumer-oriented approaches to sustainability are a significant component of the policy landscape, and are likely to remain so for some time.

In the long-term, successful implementation of environmental regulations in China will still require a broad degree of popular awareness, engagement, and legitimacy (Tilt 2010; Shapiro 2012: 100-101). This means that engaging seafood consumers is likely to form a necessary part of broader efforts to improve sustainability in the seafood market. In this paper, we explore how the insights of our study can contribute towards the design and implementation of a broad range of potential governance options, which will include not only market-based consumer-oriented campaigns but also government regulation. Both market-based consumer campaigns and more ‘top-down’ direct implementation of regulations by the Chinese government will need to take into account seafood consumer perspectives.

Defining what is unsustainably harvested is in many cases easier than defining what is sustainably harvested, as there are often clear published data on declining stock trends. In this paper, we use the peer-reviewed scientific literature to refer to particular types of seafood that are broadly accepted as being unsustainably harvested (Table 1), and avoid the

highly complex task of specifying what, more sustainable types of seafood would be. The concept of ‘sustainability’ is itself a multi-faceted issue with various competing definitions (Shapiro 2012: 136), and engaging with these debates is beyond the scope of this paper.

After describing the methods and background to the study site, we analyse some of the major characteristics of the Chinese restaurant seafood banquet market. We describe the relative popularity of different forms of seafood and the reasons behind their increasing or declining popularity through a discussion of seafood banquets in general, fish at banquets, other forms of seafood at banquets, and important characteristics and qualities of seafood at banquets. We conclude with a discussion of some of the policy implications our study raises.

## METHODS AND BACKGROUND

The focus in this study is on seafood consumption in restaurants, where banquets are very important, and not on domestic private seafood consumption, which includes different types of mostly cheaper seafood (and freshwater fish). We selected Beijing as the focal site to examine patterns of mainland Chinese seafood consumption. It is an important city for the purpose of this study for several reasons. There is wide variation in patterns of overall seafood consumption in China, and Beijing consumes less aquatic products per capita than other major urban centres in mainland China, such as the coastal cities of Shanghai or Guangzhou (National Bureau of Statistics 2011: 73). In recent decades, however, Beijing has become a significant consumer of the highly-valued seafood in banquets that we focus on in this paper, and it is the second-most populous city in China. The consumption of seafood in banquets is arguably subject to less variation than domestic private seafood consumption, as several of the key banquet dishes such as shark fin and live reef fish are typical signature dishes that are heavily influenced by one regional style—Cantonese. We also sampled seafood restaurants and consumers influenced by different regional cuisines (e.g., Fujian, Shandong) to ensure representativeness.

In general, the prominence of Beijing also means that it is broadly a cultural ‘trend-setter’ in consumption preferences. With regard to seafood consumption specifically, many of the seafood banquets that this paper focusses on are based around the practice of establishing and maintaining social relationships with government officials and business leaders. The large number of government agencies and high-profile institutional and business headquarters in Beijing make the city a particularly useful site to examine consumer perspectives in such banquets.

We conducted 34 semi-structured interviews, mostly lasting 1-2 hours, between April and July 2012 in Beijing. Respondents included 20 representatives of seafood restaurants (managers or chefs), seven regular seafood restaurant consumers, and seven key informants in the trading sector (seafood traders and representatives of national seafood trading and restaurant associations). This means that the data is based largely around seafood industry representatives’ perceptions of

consumer attitudes and behaviours. These seafood industry representatives are not only key informants regarding consumer perspectives, but they are also key decision-makers in their own right in the Chinese seafood commodity chains.

As the focus of the research was to understand consumer attitudes and behaviour, in-depth, open-ended, semi-structured interviewing was deemed more appropriate than utilising purely quantitative techniques. Restaurants were originally selected through the popular Chinese cuisine website *dianping.com*, and this technique was supplemented by field visits, introductions, and subsequent snowballing. Targeted restaurants were those that included seafood as a significant or primary aspect of their menus, and restaurants with different locations in urban Beijing, different regional cuisines and different expense levels were all included to ensure representativeness. Consumers were targeted through personal contacts of research assistants and included consumers from a range of economic classes and regions. Interviewees from the trading sector were selected through field visits to the largest seafood market, and through contacting key informants in the national seafood trading and cuisine associations. All interviews were conducted in Mandarin and subsequently transcribed into both Chinese and English. These transcriptions were then analysed and coded for important themes that emerged (Bernard 2006).

## RESULTS AND DISCUSSION

We firstly introduce the primary social characteristics of seafood banquets in Beijing restaurants. The subsequent discussion is divided into sections that deal with factors behind the relative popularity of fish at banquets, other forms of seafood at banquets, and preferred characteristics and qualities of seafood at banquets.

### Seafood Banquets

The consumption of expensive seafood in restaurants in China is in many ways a vehicle to establish and maintain social relationships (Fabinyi 2012). The anthropological and sociological literature in China has highlighted how banquets are a site of great social significance, where people attempt to create and re-affirm relationships based around gift-giving and reciprocity (Watson 1988; Yang 1994; Bian 2001). In contemporary China, many of these social relationships are based around linkages between business and government (Yang 2002), and are frequently oriented towards fairly blunt instrumental or utilitarian purposes of financial gain. The importance of shared consumption over a meal for establishing these social relationships is highlighted by one regular seafood consumer:

Once I had to introduce [an acquaintance] to [another acquaintance]. I thought they were quite busy and made arrangements for them to talk over tea, instead of dinner. But I found that they were extremely polite and courteous with each other while having tea. I prepared a gift for both,

but they still couldn't get familiar and the atmosphere couldn't lighten up. It seems that Chinese people can only get familiar and intimate over dinner. If people want to do business, they have to dine together (Interview with Consumer, 26 June 2012).

And, as one restaurant operator emphasised, seafood is of key importance in these settings: 'we cannot call it a banquet without fish' (Interview with Restaurant Manager, 20 April 2012). Seafood restaurants are considered to be high class and expensive, and a range of seafood delicacies are considered essential parts of these banquets. Several of these types of seafood are unsustainably harvested (Fabinyi 2012; Table 1).

Most restaurants have a range of dishes and rooms that allow for different levels of consumption. At the lower level, 'family' banquets will cost CNY 50-150 (USD 8-24) per person, and will rarely include the most expensive seafood (Table 1). Weddings are also common at certain times of the year, and typically have set menus that are not overly expensive. The activities that all restaurants identified as most profitable were either business or government banquets. The costs involved in these banquets vary significantly depending on the importance of the occasion and what dishes are ordered, but the most common response among restaurant operators was between CNY 300-500 (USD 47-79) per person.

Importantly, this figure does not include alcohol, which in many cases can form more than half of the cost of the banquet. Expensive Chinese spirits, in particular the highly-priced *Maotai* (a sorghum-based liquor) are consumed at these banquets, and imported red wines are often consumed as well. More expensive bottles of *Maotai* often cost well over CNY 5000-10,000 (USD 791-1582), which means that a table of six or seven people can often spend well over CNY 10,000-20,000 (USD 1582-3165).

Private businesses and government agencies alike use restaurant banquets as a way to establish the personal relationships that are necessary to successfully participate in either field. For government agencies, this consumption is popularly referred to as *gongkuan xiaofei*, or 'public fund expenditures', which means their expenses are re-imbursed. Restaurants often deliberately locate themselves in business or government districts, and several restaurateurs even noted that in addition to the Spring Festival (or Chinese New Year), the other boom in restaurant consumption came during the National People's Congress and the Chinese Peoples' Political Consultative Conference, when government officials hold numerous meetings. Male customers tend to outnumber females, and the age groups appear to be biased to those of relatively senior workplace positions, usually aged above 30.

### Fish at banquets

In this section we focus on the major types of fish that are consumed in Beijing seafood banquets and the reasons behind their popularity. These include live reef fish, various types of fish influenced by Japanese cuisine, and a range of lower-priced farmed fish.

Costing upwards of USD 600/kg in some restaurants, the Napoleon wrasse, costing upwards of USD 600/kg in some restaurants, is the most expensive fish in Beijing seafood restaurants. It is listed as endangered on the IUCN Red List (Russell 2004). Other live reef food fish such as the mouse grouper costing up to USD 474/kg and classified as threatened (Sadovy et al. 2008), the leopard coral grouper—up to USD 316/kg and classified as near-threatened (Cornish and Kiwi 2004), and other groupers follow behind. Napoleon wrasse and mouse grouper are both recommended as good for the skin, and these two fish along with the leopard coral grouper are all prized as particularly beautiful fish.

However, the main attraction of such live reef food fish is their price. Interviewees consistently emphasised this in their discussions on why these fish were popular. “At least the price [of these fish] will impress the guests and satisfy the host’s pride” one chef commented; “ordering fish at the price of CNY 80-90 (USD 13-14) [for business banquets] is not suitable’ (Interview with Chef, 23 May 2012). A consumer pointed out that ordering fish of the highest price is ‘a way of showing sincerity and hospitality’ (Interview with Consumer, 30 April 2012). The settings of many restaurants also highlight the status and prestige associated with eating these types of fish; expensive antiques, gleaming chandeliers and other decorations are common.

For these groupers and the Napoleon wrasse, smaller-sized fish are seen as more suitable, as the flesh of the larger fish is considered ‘not as tender’ as smaller fish. For Napoleon wrasse and leopard coral grouper, fish between 0.5 to 0.7kg are considered as an ideal size. There is a considerable financial risk for restaurants involved with buying some of the higher-priced reef fish such as Napoleon wrasse and mouse grouper. If they die while being stored in the restaurant aquarium, the restaurant will suffer a significant loss, and so most restaurants require bookings several hours or days in advance for these fish. They purchase from the market in response to a specific order, which is a way to reduce the risk. As with the consumption of shark fin and distinctively southern forms of wildlife consumption (Clarke et al. 2007; Li 2007), the consumption of these varieties of fish in Beijing is a relatively recent phenomenon. Several restaurants emphasised that the consumption of these fish had become much more common over the last decade.

The popularity of Japanese restaurants has increased markedly over the past decade in Beijing. As one example, one Japanese restaurant manager we interviewed described how the restaurant opened the first branch in 2001, another one in 2002, and by mid-2012 had six branches across the city. Fish are commonly eaten raw as sushi and sashimi. Salmon is the most popular type of fish in Japanese restaurants, while tuna and Arctic clams are also popular. According to a 2012 report, Chinese imports of Atlantic salmon from Europe ‘grew from virtually nothing in 2000 to more than 12,000 metric tonnes in 2011’ (Seafood Source 2012).

This form of seafood consumption is especially popular during the summer, and the style of consumption is different to the more formal types of banquets popular with the other

forms of seafood discussed in this paper. Japanese restaurants are more popular instead with younger consumers such as students (many of whom are Japanese and Korean), and the cost of the food is cheaper and the atmosphere more informal in these restaurants. Another recent trend among seafood restaurants in Beijing is the pufferfish. This is a dish commonly associated with Japan, although in some southern Chinese provinces eating cooked pufferfish is a long tradition.

There are significant differences between marine and freshwater fish in terms of prestige and price. Very few freshwater fish are consumed in banquets (one exception being fish head from Qiandao lake in Zhejiang province), and freshwater fish are generally considered to be of lower prestige and class than marine fish. As one chef put it succinctly, “Rich people eat seafood. Those who are not so rich just eat freshwater fish” (Interview with Chef, 20/4/12). Freshwater fish such as carp are cheaply available around Beijing, and are commonly farmed in the region. While expensive restaurant consumption will emphasise seafood, freshwater fish consumption is more common in home consumption. Some restaurants will include some more expensive freshwater fish such as mandarin fish (*guiyu*) and perch (*luyu*), which, together with lower-priced marine fish such as turbot (*duobaoyu*), are mostly consumed on family outings, among friends, or at home.

### Other seafood delicacies at banquets

In addition to fish, other seafood delicacies also play a large part in restaurant consumption. Lobsters are very popular, and Australian lobsters in particular are favoured as being of the highest quality. A single lobster will often generate three different dishes, and consuming raw lobster as sashimi is a very common method. Abalone has traditionally been a very popular form of seafood, but is declining in popularity. According to restaurant managers and chefs, consumers are increasingly wary of the perceived high fat and cholesterol levels in abalone.

Most noteworthy is the contrasting fortunes of two seafood delicacies that are often served in soup – shark fin and sea cucumber. Out of the 20 restaurant representatives that we interviewed, 19 sold shark fin currently or in the past, and all 19 restaurant representatives reported a significant decline in the consumption of shark fin. The consumption of shark fin in Hong Kong and mainland China has recently been subject to an intensive consumer-awareness campaign run by multiple NGOs (WildAid 2009). In mainland China, this has involved using celebrity basketball player Yao Ming as an advocate, emphasising the cruelty involved in the practice of ‘finning’ and the shark stock declines that shark fin soup consumption contributes to (see Dulvy et al. 2008; Camhi et al. 2009). All restaurant operators agreed that the advertisements with Yao Ming had definitely raised awareness among consumers.

However, while restaurant operators agreed that the advertisements had raised consumer awareness of the issues involved with the consumption of shark fin, they were varied in their views on how much impact it had had on actual consumption practices. Some agreed that the advertisements

had had a significant effect on sales, but others pointed out that just because people were talking about it, it did not actually impact consumption: “Many people talk about this ad by Yao Ming. But the point is legislation. Not all of us are self-conscious. It’s the regulations that count” (Interview with Chef, 20 April 2012).

Others pointed out that even though customers may feel reluctant to eat shark fin after viewing the advertisements, “they may ignore this when they eat them – others are eating, why wouldn’t I? For example, when I go out for dinner with leaders [i.e., workplace leaders], I have to eat such food after it is served and the leaders start eating. If I don’t eat, they may think that I regard the order and arrangements as improper” (Interview with Restaurant Manager, 20 April 2012). Others suggested that any reduction in shark fin consumption may only be restricted to larger cities such as Beijing: “only the citizens in big cities eat less, since they have the more advanced concepts, like green and natural food. But in terms of the total sales, China’s shark fin will still sell well, because in the medium and small cities, it hasn’t run its full course. In many county-level cities, shark fin still represents luxury” (Interview with Trader, 19 June 2012).

In addition to the environmental and ethical concerns highlighted by the Yao Ming advertisements, restaurateurs pointed to several other factors that in their view were more likely to be responsible for the decline in shark fin consumption. Firstly, in the same way as abalone is now perceived to be high in cholesterol and unhealthy, shark fin was similarly frequently described as ‘greasy’, high in preservatives, overly processed and generally low in nutrition. Other managers and chefs suggested that it was ‘out of date’ and had simply gone out of fashion.

However, the most-emphasised factor behind the decline in shark fin consumption in Beijing restaurants highlighted by managers and chefs was the preponderance of fake shark fins on the market. Selling synthetic shark fin is common in the restaurant market, with the result that consumers do not trust buying shark fin. Several restaurant operators acknowledged this practice, justifying it on economic grounds.

Recent years in China have seen a wide range of extremely high-profile food safety and food quality scandals, and food safety is frequently cited as one of the most pressing issues for Chinese consumers (Yan 2012). The issue of authenticity is also connected with the promotion of consumer awareness campaigns focussing on sustainability: as one manager pointed out, “customers think that shark fin is now protected, so that if they go to consume it, it will be a fake one—so they don’t like to order shark fin anymore” (Interview with Restaurant Manager, 8 April 2012). This quote suggests that consumers may be well aware of the issue of overfishing of sharks, but that this is not actually the reason why they are avoiding eating shark fin. Instead, the prominent anti-shark fin campaigns are perceived to have led to protection for sharks. This has led some consumers to think that all shark fin served now must be fake, which is viewed as a bigger problem.

In contrast to shark fin, sea cucumbers have become increasingly popular. One indication of this is the production

levels of sea cucumbers in China, which, according to official statistics at least, are increasing rapidly (Figure 1).

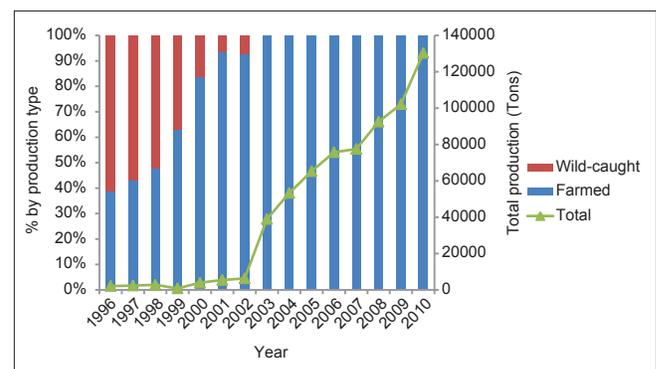
Sea cucumbers are widely viewed as nutritious, and have long been incorporated in traditional Chinese medicine handbooks as treatment for a range of ailments. As one manager described, “sea cucumbers can help prevent wrinkles, and they consist of a high level of vitamins and barely any cholesterol. But shark fins and abalone contain a relatively large amount of cholesterol and fat” (Interview with Restaurant Manager, 7 April 2012). They are also generally viewed as excellent for male virility. Dried sea cucumbers are commonly available in stores throughout northern China, but in restaurants, the live sea cucumbers are seen as more nutritious and fresh.

Sea cucumbers are regarded as being more difficult to synthesise, so they also avoid the strong connotations with fakery associated with shark fin—although one consumer advised that when he bought sea cucumbers for personal consumption he bought them from Russia, as he believed sea cucumbers produced in China were fake. Sea cucumbers have often replaced shark fin as a substitute dish. In the famous Qing Dynasty (1644-1912) dish *fotiaoqiang* (literally meaning ‘Buddha jumps over the wall’, deriving from a story that suggested the smell of the meat-based dish was so delicious that it enticed vegetarian monks to jump over the temple wall), several chefs noted that they had replaced shark fin—one of the traditionally core ingredients of the recipe—with sea cucumbers.

In southern China and Hong Kong, a wide variety of sea cucumbers are traded and consumed, many of which are over-exploited or depleted (To and Shea 2012; Purcell et al. 2013). In Beijing, the temperate species *Apostichopus japonicus* is preferred. This species is farmed heavily in mainland China (Chen 2004; Figure 1).

### Important characteristics and qualities of seafood at banquets

There are several cross-cutting characteristics of seafood that affect the preferences of consumers in Beijing restaurants (Table 2). In the following section we discuss the most common themes that emerged from our interviews,



Source: China Fishery Statistical Yearbook 2011

**Figure 1**  
Production levels (tonnes) of sea cucumber in China 2002-2010

which include the popularity of different regional cuisines and cooking techniques, the values placed on wild vs. farmed fish, awareness of, and interest in sustainability and traceability issues, and the importance of freshness.

### **Regional cuisine preferences**

Beijing is a cosmopolitan, international city, with a diverse range of cuisines. Seafood, however, is closely associated with southern Chinese cuisine, in particular, *Yue cai* (Cantonese cuisine). Cantonese cuisine is regarded as one of the ‘great culinary traditions’ of China--usually classified as either four or eight traditions (Swislocki 2009: 9)--and is distinctive for its emphasis on light and fresh flavours, species diversity, and seafood (Anderson and Anderson 1977; Anderson 1988). In terms of class or status, Cantonese cuisine is commonly held to be prestigious and highly ranked. The rise in prestige of Cantonese cuisine dates from during the Qing Dynasty, and is likely related to the region’s significance during this period as a centre of international trade and commerce (Simoons 1991). In recent years, Cantonese cuisine has become more popular in urban centres throughout the country, and the rise of Cantonese cuisine is one of the key factors behind the increase in seafood consumption in restaurants throughout China (Fabinyi 2012: 87). Major southern cities such as Hong Kong, Guangzhou, and Shenzhen remain both major centres for Cantonese cuisine, and major trading hubs for many varieties of high-value seafood consumed in banquets throughout China.

In Cantonese cuisine, most seafood dishes are steamed so as to preserve the flavour and texture of the fish. Highly-priced fish such as Napoleon wrasse, mouse grouper, and leopard coral grouper are almost always steamed to ‘keep the original taste’ (Interview with Chef, 26 May 2012) and ‘preserve the nutrition’ (Interview with Restaurant Manager, 9 April 2012). As one manager summarised, ‘we advise steamed fish for guests here, because such cooking keeps the freshness and the tenderness of the fish. Too much seasoning would hide the delicate flavours’ (Interview with Restaurant Manager,

20 April 2012). Another common technique for some of the lower-priced groupers, and sometimes leopard coral grouper, is a soup where the fish is cut into several pieces and boiled (*guoqiao*).

There are other important regional influences in Beijing restaurants. *Lu cai*, or Shandong cuisine, is another one of the great culinary traditions of China, and is also associated with seafood. Many of the temperate sea cucumbers eaten in Beijing restaurants come from Shandong and Liaoning provinces, which are both heavily influenced by Shandong cuisine. As indicated earlier, the emergence of Japanese restaurants is also a significant trend, and even Western styles of seafood are being introduced in many restaurants: cod, for example, is sometimes eaten as fillets.

Most restaurants offer a combination of regional styles with contrasting flavours and styles. As one manager noted, for example, ‘now they’re complementing. So in a Cantonese restaurant, there might be two cooks who mainly deal with Hunan and Sichuan cuisines, learning from each other’ (Interview with Restaurant Manager, 7 April 2012). Hunan and Sichuan cuisines, with spicy, heavier styles, are common in Beijing restaurants, as are the traditionally heavier northern-style cuisines with a focus on noodles instead of rice. Many restaurants will have Hunan dishes for ‘common consumption’, and the Cantonese dishes for ‘higher-class consumption’ (Interview with Chef, 10 May 2012) such as seafood banquets.

### **Aquaculture, sustainability, and traceability**

According to all restaurant representatives, the majority of customers do not actively ask about whether the seafood is wild or farmed. A common response from restaurant representatives was that very few customers ask about this issue, because ‘everyone knows that wild fish are very rare now and that most fish are farmed’ (Interview with Restaurant Manager, 7 April 2012). While all restaurants agreed that customers would prefer wild fish to farmed fish, ‘customers know there are very few wild ones. So they’re not strict on that. They hardly ask either’ (Interview with Chef, 26 May 2012). This may indicate low levels of awareness about the diversity of farmed and wild fish supplies among consumers (and in the seafood industry) in China.

Restaurant managers and consumers alike also displayed low levels of interest in and awareness of sustainability and traceability issues. Other than the Yao Ming advertisements discussed earlier, customers do not tend to display a great interest in these issues, according to restaurant operators. This also appears to be related to the lack of traceability mechanisms in the Chinese market. As one manager described: ‘The product place is quite vague. If it is said to be from Australia, how can you tell whether it is true? We can only tell it from its quality. They can tell us it came from the moon, it doesn’t matter’ (Interview with Restaurant Manager, 14 April 2012). Or as another chef put it: ‘I don’t know much about the breeding home. We just purchase them from the market’ (Interview with Chef, 7 May 2012).

**Table 2**  
*Preferred characteristics of seafood among consumers in Beijing seafood banquets*

Characteristic of seafood	Notes
Size of dish	For live reef fish, smaller-sized fish considered more suitable (0.5-0.7kg).
Regional style	Cantonese is the most closely associated with seafood, especially tropical seafood. Shandong and Fujian cuisines also important.
Cooking technique	Steaming is the most commonly preferred cooking method.
Wild-caught or farmed	Consumers prefer wild-caught but appear to rarely actively seek out wild-caught product.
Sustainably sourced	Consumers aware of some sustainability issues such as those to do with shark fin, but does not appear to be a high priority.
Form of seafood	Freshness of seafood extremely important. Live seafood highly preferred over frozen.

Source: Fieldwork data

Several operators confidently asserted that the Napoleon wrasse that they served came from Australia, despite the fact that this fish has not been exported from Australia for the food fishery since 2003 (AFMA 2012). Another suggested leopard coral grouper came from America (where they are not found) (Interview with Chef, 7 May 2012), while another noted that the fish were caught with nets (most of them are not), and therefore could not be poisoned (Interview with Chef, 23 May 2012). Out of 20 restaurant representatives, not one acknowledged having heard of the use of cyanide to catch live reef fish, which is a common method to catch these fish in many source locations (Sadovy et al. 2003). As one manager argued, if chemicals had been used to catch the fish, 'the fish would have died. We only purchase the fresh and alive ones' (Interview with Chef, 19 April 2012). Managers, like customers, perceive that because they can see the fish alive, at a market and then in the aquarium in the restaurant, it is 'fresh'. Consumers thus do not generally know where the fish come from, or the ways in which they are caught.

### *Freshness of seafood as a preference*

Instead of sustainability and traceability issues, a key issue in consumer seafood preferences is seen to be the freshness of the seafood. As one chef noted when he was asked whether customers enquired about sustainability issues or where the seafood came from, 'They don't care... They mostly care about whether it is fresh (*xinxian*) or not' (Interview with Chef, 18 April 2012). As another manager suggested, 'The key problem is whether the seafood is fresh or not. If it is not fresh, no matter how you cook the taste will not be good' (Interview with Restaurant Manager, 8 April 2012). Anthropologist Eugene Anderson has noted that this quality is highly prized in Chinese cuisine: 'Fresh seafood should be *fresh*... Food is part of a system of belief in which quality, freshness, purity and high standards are matters of necessity, if one is to remain in any way truly human' (1988: pp174 [emphasis in original]; 139).

This is of special importance in seafood restaurants because much of the seafood is steamed, and consumers are wary about fake seafood. When asked if his restaurant sold frozen leopard coral grouper, one chef asserted: 'Absolutely not. Such costly seafood as leopard coral grouper served in our restaurant is definitely fresh. We have never and will never sell any dead or frozen ones. Besides, customers won't accept it either' (Interview with Chef, 5 June 2012). Steaming is a delicate method of cooking fish. In addition to the better taste attributed to this method, eating fish in this way is also said to be a way of ensuring that the fish is actually fresh, and is not a frozen dead fish (Interview with Consumer, 30 April 2012).

## **CONCLUSION AND POLICY IMPLICATIONS**

How to adequately address the sustainability of local and global seafood markets is an ongoing issue facing managers of marine resources (Smith et al. 2010; Cinner et al. 2013). China's rapid economic growth and corresponding

heightened demand for seafood means how best to incorporate sustainability into the Chinese seafood market will be particularly important. Recent years have seen increased levels of activity from governments, international institutions and NGOs, the private sector and researchers, on how to engage the Chinese seafood market in sustainability concerns (Clarke et al. 2007; Clarke 2009; Buluswar et al. 2011; Hanson et al. 2011; Fabinyi 2012). These activities include calls for greater forms of traceability within the Chinese seafood market (Clarke 2009; Buluswar et al. 2011; Hanson et al. 2011); the adoption of certification schemes such as those promoted by the Marine Stewardship Council (MSC) (MSC 2011); the use of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as a conservation tool for endangered species consumed in China (Sadovy 2010); and the development of consumer awareness campaigns, one notable example being the one on shark fin consumption (WildAid 2009).

This paper has aimed to contribute to the discussion on the Chinese seafood market by emphasising the role of consumer perspectives. Consumer perspectives are an important driver of food consumption trends. These will need to be taken into account in any policy action; yet, to date remain poorly understood for the Chinese seafood market. We have focussed in particular on the role of banquets, where much high-value, unsustainably harvested seafood is consumed, and on how and why certain types of seafood are becoming more or less popular. Our discussion of Beijing seafood banquets has identified a number of important trends in the popularity of certain types of seafood, and a number of important attitudes that contribute towards influencing these trends.

The consumption of seafood in banquets is becoming progressively more common, as greater numbers of consumers increase their disposable income. Certain types of seafood such as live reef fish, sea cucumbers and lobsters appear to be gaining in popularity, while abalone and notably, shark fin are declining in popularity. While awareness of, and interest in sustainability issues has been stimulated by consumer awareness campaigns focussed on shark fin; overall, such awareness and interest in sustainability and traceability remains relatively low. Instead, more important themes for Beijing consumers at banquets when choosing seafood were: social status and prestige; the issue of food safety and quality, and health and nutrition with an emphasis on freshness.

These findings have important implications for policy. Our analysis of attitudes towards environmental sustainability suggest that consumer awareness campaigns have had mixed results. Restaurant operators were varied in their assessments over what level of impact the advertisements focussing on shark fin may have had on actual consumption practices. However, all the operators agreed that shark fin consumption was declining (for a variety of reasons), and that the advertisements had dramatically raised awareness of the links between restaurant consumption and the declines in shark stocks. Such assertions are backed by other developments, such as high-profile hotels in Hong Kong and mainland China

taking shark fin off the menu (McGilvray 2012); and the announcement earlier in 2012 that the government would likely ban shark fin from the menu in official government banquets within three years (Xinhua 2012).

The decrease in popularity of shark fin seems to be matched by an increase in popularity for sea cucumbers, a type of seafood that is culturally and socially similar in terms of its function in banquets. Such a process highlights the potential for ‘substitution’ of particular types of seafood with other, more sustainable options. While all sea cucumbers may not be more sustainable (Purcell et al. 2013), these developments highlight how the consumption of dishes such as shark fin is not necessarily an inflexible, unalterable tradition, but a historically situated social practice that is subject to change.

Notwithstanding significant critiques of consumer-oriented seafood campaigns (Jacquet et al. 2010), further consumer awareness campaigns on particular types of seafood are likely to continue in China. In August 2012, for example, at a major seafood summit held in Hong Kong, a proposal was announced for a moratorium on trade of the Napoleon wrasse, which may lead to future campaigns (WWF 2012). If such consumer awareness campaigns continue, our study has highlighted that there are several themes that they could potentially focus on more productively in the Chinese market.

### Potential campaign and policy initiatives for seafood

While the sustainability of particular types of seafood will likely form an important part of any such campaign, campaigners may do better to also focus attention on issues relating to locally valued concepts of freshness and food safety. With regard to live reef food fish such as the Napoleon wrasse, for example, there are a host of issues that campaigns could potentially focus on: the cyanide that remains a common technique for catching the fish (Fabinyi and Dalabajan 2011); the high quantities of antibiotics and other tranquilisers that are also injected into the fish during their long journeys into mainland China (Irendra 2012); the long distances from mainland China that these fish travel; and the nature of the grow-out cages where many live reef fish spend a significant portion of their lives before being sold on the market. These grow-out cages are linked to further issues such as poor hygiene and quality standards, and the fact that dynamite or blast fishing is sometimes used to catch the trash fish used to feed the reef fish (M. Fabinyi, personal observations, Palawan province, Philippines, 2006-2012). If consumers were more aware of such health issues surrounding the import of Napoleon wrasse and other live reef food fish, they may be less willing to eat it.

As our discussion demonstrated, luxury seafood consumption is closely tied to social networking and rent-seeking behaviour by business and government officials (cf. Fabinyi 2012: 89). As government banquets are one of the most important types of luxury seafood banquets, regulations that limit the capacity of government officials to spend lavishly on these banquets may reduce overall demand for luxury seafood. Recent political

developments in China concerning government behaviour appear to have had major effects on the luxury seafood market. Shortly after taking office in late 2012, the new Xi Jinping-Li Keqiang administration announced a crackdown on the use of public fund expenditures, lavish spending and corruption by government officials (China Daily 2013a). Such a crackdown appears to have already had a significant impact on luxury seafood restaurants and other luxury industries – one government newspaper has cited a government survey that found high-end restaurants in Beijing have seen a 35 percent fall in business since the measures were announced (China Daily 2013b). Shortly before publication of this article (May 2014), the policy was ongoing, and several restaurants that we had conducted follow up interviews with, reported a significant decrease in demand for specific types of luxury seafood such as Napoleon wrasse.

While it is too early to tell the long-term impact of these regulations and how seafood consumers and the industry will adapt, this would be a productive area for future research. Other areas for future research would include the potential role of full-cycle aquaculture and improved traceability mechanisms in the Chinese seafood market. Our study found that only very few consumers appear to seek out wild-caught product, for example, and have very low levels of interest and awareness in where and how the seafood is caught. Understanding these perspectives in greater depth would have implications for policy interventions that seek to stimulate consumer demand for seafood sourced from particular locations or fisheries, or that seek to substitute wild-caught product with farmed product.

In sum, China is a major, and rapidly growing, seafood market. This growing market is significantly affecting the environment and livelihood of source countries; how best to tackle the sustainability of this seafood market, is an important challenge for policymakers (Hanson et al. 2011; Fabinyi 2012; Cinner et al. 2013). Understanding the social context of this seafood market will be a necessary part of strategies that attempt to address sustainability concerns in a realistic and appropriate way.

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