

## 16. RIBARSTVO

### METODOLOŠKA OBJAŠNENJA

#### Izvori i metode prikupljanja podataka

Statistika ribarstva prati kretanja osnovnih pokazatelja iz područja slatkovodnog i morskog ribarstva te prikuplja podatke o zaposlenom osoblju, osnovnim sredstvima potrebnima za obavljanje ribolova, plovnim sredstvima, ribarskoj opremi, površinama šaranskih i pastrvskih ribnjaka, ulovu i proizvodnji morske i slatkovodne ribe, ljuskavaca, kamenica, ostalih mekušaca i školjkaša, proizvodnji mladi te utrošku hrane i gnojiva u ribnjacima.

Statistika morskog ribarstva prati posebno podatke za pravne osobe i dijelove pravnih osoba, a posebno za ribare obrtnike koji obavljaju gospodarski ribolov (Zakon o morskome ribarstvu, NN, br. 74/94.) ili se bave uzgojem (proizvodnjom) morske ribe i ostalih morskih organizama. Podaci za pravne osobe i dijelove pravnih osoba iz djelatnosti morskog ribarstva prikupljaju se redovitom izvještajnom službom.

Podaci o ribarima, plovilima i njihovoj opremi do 1997. preuzimani su od Ureda za gospodarstvo, a od 1998. Ministarstvo poljoprivrede, šumarstva i vodnog gospodarstva – Uprava ribarstva – preuzelo je u svoju nadležnost evidenciju o broju ribara, plovila i njihovoj opremi na osnovi izdanih povlastica za obavljanje gospodarskog ribolova.

Podaci o ulovu i proizvodnji morske ribe i drugih morskih organizama prikupljaju se tromjesečno. Za pravne osobe i njihove dijelove podaci se prikupljaju redovitom izvještajnom službom u tijeku godine, dok su ribari obrtnici određeni selekcijom prema ostvarenom prometu iz gospodarskog ulova.

Podaci o ulovu i proizvodnji morske ribe daju se po najvažnijim skupinama. Iskazuje se ukupan iskrcan ulov svim ribolovnim sredstvima korištenima tijekom tromjesečja bez obzira na područje ulova. Unose se količine istovarene svježe ribe, tj. stvarni ulov umanjen za one količine koje su iz bilo kojeg razloga odbačene od trenutka izvlačenja iz mora do istovara na kopno. Podaci za ljuskavce, kamenice i ostale mekušce i školjkaše odnose se na jestivu i nejestivu težinu ulova.

Uz navedene podatke, pri izradi konačnih rezultata o uzgoju (proizvodnji) morske ribe i drugih morskih organizama korišteni su podaci Ministarstva poljoprivrede, šumarstva i vodnog gospodarstva – Uprava ribarstva.

Kod slatkovodnog ribarstva izvještajne jedinice jesu pravne osobe i njihovi dijelovi koji se bave proizvodnjom slatkovodne ribe i mladi te ribari obrtnici koji se bave gospodarskim slatkovodnim ribolovom ili uzgajaju slatkovodnu ribu i mlad.

Podaci o ribarima, plovnim sredstvima, ribarskoj opremi, površinama šaranskih i pastrvskih ribnjaka, količini utrošene hrane, gnojiva, energije, goriva, vrijednosti utrošenog materijala, vrijednosti izvršenih usluga i proizvodnji i ulovu slatkovodne ribe i mladi prikupljaju se jedanput na godinu. Podaci o proizvodnji i ulovu slatkovodne ribe te proizvodnji mladi daju se po najvažnijim vrstama.

#### Obuhvat i usporedivost

Izvještajnom službom obuhvaćene su pravne osobe i njihovi dijelovi te ribari obrtnici koji obavljaju djelatnost definiranu prema NKD-u 2002. u području B Ribarstvo te druge pravne osobe i ribari obrtnici koji obavljaju navedenu djelatnost, a razvrstani su drugdje. Kod pravnih osoba i njihovih dijelova obuhvat je potpun. Kod ribara obrtnika u slatkovodnom ribarstvu obuhvat je potpun, dok je kod ribara obrtnika morskog ribarstva obuhvat selektivan prema ostvarenom prometu iz gospodarskog ulova.

#### Definicije

**Gospodarski ribolov** jest djelatnost ulova ribe i drugih morskih organizama radi stjecanja dobiti (Zakon o morskome ribarstvu – pročišćeni tekst, NN, br. 46/97.).

## FISHING

### NOTES ON METHODOLOGY

#### Data and methods of data collection

*The statistics of fishing surveys basic indicators in the area of freshwater and maritime fishing. The data are collected on personnel, basic fishing means, vessels, fishing equipment, surface areas of carp and trout fishponds, catches and the production of sea and freshwater fish, crustaceans, oysters and shell-fish, production of milt, consumption of food and fertilisers in fishponds.*

*Data are collected separately for legal entities and parts thereof, as well as for private independent fishermen engaged in professional fishing (the Law on Maritime Fishing, NN, No. 74/94) or in the production of sea fish and other sea organisms. Data for legal entities and parts thereof in fishing are collected through regular annual reports.*

*Data on fishermen, vessels and their equipment were obtained from the Office of Economy until 1997, and since 1998 the Ministry of Agriculture, Forestry and Water Management – Department of Fishery has taken responsibility for the records on the number of fishermen, fishing vessels and their equipment, based on the issued licences for engagement in professional fishing.*

*Data on catch and production of sea fish and other sea organisms are collected quarterly. Data for legal entities and parts thereof are collected through regular annual reports, and those for private fishermen are determined by selection according to the realised turnover of commercial catch.*

*Data on catch and production of sea fish are given by major groups through presentation of the total unloaded catch weight including all fishing means used in the respective quarter, irrespective of the catching area. It comprises the quantity of fresh fish unloaded, i.e. actual catch lessened by the quantity of fish that was, for no matter what reason, discarded from the total quantity in the period from the moment of catch until unloading. Data on crustaceans and shellfish refer both to edible and non-edible catch weight.*

*Along with the above mentioned data, in getting the final data on the production of sea fish and other sea organisms, data of the Ministry of Agriculture, Forestry and Water Management – Department of Fishery were used.*

*Reporting units in freshwater fishing are legal entities and parts thereof engaged in the production of freshwater fish and milt as well as tradesmen engaged in the commercial freshwater fishing or in the production of freshwater fish and milt.*

*Data on fishermen, vessels and fishing crafts, fishing equipment, areas of carp and trout fishponds, quantity of food, fertilisers, energy and fuel consumed, value of material used, services done and data on production and catches of freshwater fish and milt are collected once a year. Data on production and catches of freshwater fish and production of milt are selected by main species*

#### Coverage and comparability

*Reports comprise legal entities and parts thereof as well as independent fishermen engaged in the activity defined in the NKD 2002. under section B Fishing and other legal entities and independent fishermen engaged in the above said activity but classified somewhere else. The coverage of legal entities and parts thereof is full. The coverage of independent fishermen engaged in freshwater fishing is also full, while that of independent fishermen engaged in maritime fishing is selective, that is, it is defined by the turnover realised in commercial catches.*

#### Definitions

**Commercial fishing** is an activity of catching fish and other sea creatures for profit (the Law on Maritime Fishing – consolidated text, NN, No. 46/97).

**Boat** is a vessel that has the length of 12 m and over and weight of 15 GT and

**Brod** je plovni objekt čija je duljina veća od 12 m i veličina plovila (GT) veća od 15. **Ribarski brod** jest brod namijenjen i opremljen za ulov ribe ili drugih živih bića u moru ili na morskome dnu.

Prema Pravilniku o povlastici za obavljanje gospodarskog ribolova na moru (NN, br. 99/97.), ribarske mreže razvrstane su u sljedeće skupine: povlačne mreže (koče), okružujuće mreže (plivarice), potegače i stajačice (jednostruke i trostruke).

**Povlačnim mrežama (kočama)** pripadaju pridnena povlačna mreža (koča), pelagijska povlačna mreža (koča), obalna povlačna mreža (kočica), dredže (kunjcare) i dredže (ramponi).

**Okružujućim mrežama (plivaricama)** pripadaju plivarica za malu plavu ribu, plivarica za veliku plavu ribu (tunolovka), plivarica za ciple (ciplara), plivarica za igle (plivarica igličara) i plivarica za gavune olige (plivarica oližnica).

**Potegačama** pripadaju ljetna trata ili srdelara, zimski trata ili girarica, migavica, igličara, šabakun, potegača za olige, kogol i strašin.

**Mrežama stajačicama** pripadaju jednostruke mreže stajačice – oližnice, gavunare, girare, vojge, menulare, poklopnice, bukvar, prostice, polandare, psare, jastogare, sklatare i rakovice te trostruke mreže stajačice – salpare, poponice, listarice i sipare.

**Ljuskavcima** pripadaju jastog, škampi i ostali ljuskavci.

**Ostalim mekušcima i školjkašima** pripadaju dagnje i ostali školjkaši, lignja, sipa, hobotnica i muzgavac.

## STATISTIČKE PUBLIKACIJE

### Statistička izvješća

177 R,O; 358 R,ZO,O,S.

### Studije i analize

10. Josip Basioli:  
Ribarstvo u kotaru Karlovac

over. **Fishing boat** is a boat intended and equipped for catching fish and other creatures in the sea or on the seabed.

According to the Regulation on Licence for Commercial Maritime Fishing (NN, No. 99/97), fishing nets are classified into following groups: trawl nets, purse seine nets, drift nets and single and triple gillnets.

**Trawl nets** are: benthic trawl net, pelagic trawl net, coastal trawl net, dredges for Noah's ark and dredges.

**Purse seine nets** are: purse seine for small pelagic fish, purse seine for great pelagic fish, purse seine for mullets, purse seine for needlefish and purse seine for smelt.

**Drift nets** are: drift net for sardines, drift net for picarels, motion drift net, drift net for needlefish, drift net for amberjack, drift net for smelt, drift net with trap and drift net with frightening rope.

**Single gillnets** are: gillnet for sand smelt, gillnet for smelt, gillnet for picarel (*Spicara smaris*), gillnet for sardines, gillnet for picarel (*Spicara flexuosa*), gillnet for cacckarel, gillnet for bogue, gillnet for various fish, gillnet for Atlantic bonito, gillnet for sharks, gillnet for lobsters, gillnet for angle shark and gillnet for sea spider. Triple gillnets are gillnet for salema, triple gillnet for various fish, gillnet for solea and gillnet for cuttlefish.

**Crustaceans** are lobster, shrimps and other crustaceans.

**Other molluscs and shellfish** are: mussels and other shellfish, squid, cuttlefish, octopus and musk octopus.

## STATISTICAL PUBLICATIONS

### Statistical reports

177 R,M; 358 R,AM,M,OS.

### Studies and analyses

10. Josip Basioli:  
Fishing in the District of Karlovac

R = Republika Hrvatska  
ZO = zajednice općina  
O = općine

R = the Republic of Croatia  
AM = Regional Associations of Municipalities  
M = Municipalities  
OS = Ownership sectors

16-1. PLOVNA I RIBOLOVNA SREDSTVA NA MORU  
MARINE VESSELS AND FISHING CRAFT

|                        | Brodovi <sup>1)</sup><br>Ships <sup>1)</sup> |  | Ribarske mreže prema vrstama<br>Fishing nets by type |  |                        |  |
|------------------------|--|--|--|--|------------------------|--|
|                        | broj<br>Number                               | ukupna veličina plovila, GT<br>Total size of vessels, GT | povlačna mreža (koča)<br>Trawl nets                  | okružujuće mreže (plivarice)<br>Purse seine nets | potegače<br>Drift nets | jednostruke i trostruke mreže<br>stajačice<br>Single and triple gillnets |
| <b>Ukupno</b><br>Total |  |  |  |  |                        |  |
| 1996.                  | 302  | 8 354  | 1 519  | 384  | 1 174                  | 156 899  |
| 1997.                  | 290  | 7 361  | 1 519  | 381  | 1 181                  | 156 942  |
| 1998. <sup>2)</sup>    | 323  | 10 699   | 1 410  | 608  | 816                    | 9 160 274  |
| 1999.                  | 381  | 17 659   | 1 552  | 577  | 774                    | 10 288 577   |
| 2000.                  | 375  | 16 540   | 1 527  | 610  | 828                    | 9 936 894  |
| 2001.                  | 579  | 20 097   | 1 728  | 659  | 878                    | 7 642 545  |
| 2002.                  | 660  | 21 800   | 1 785  | 725  | 969                    | 12 500 000   |
| 2003.                  | 477  | 27 604   | 2 082  | 916  | 1 149                  | 16 628 910   |
| 2004.                  | 475  | 27 404   | 2 078  | 920  | 1 151                  | 16 629 827   |
| 2005.                  | 478  | 27 695   | 1 951  | 895  | 1 102                  | 17 365 505   |

1) Do 1997. brodom se smatra plovni objekt čiji je volumen veći od 28,32 m<sup>3</sup>, a otad brodom zovemo plovni objekt čija je duljina veća od 12 m i veličina plovila (GT) veća od 15.

2) Do 1997. jednostruke i trostruke mreže stajačice iskazivane su u komadima, a otad u metrima.

1) Until 1997, boats were defined as vessels displacing 28.32 m<sup>3</sup> of volume, and since then they have been defined as vessels with the length of 12 m and over and weight of 15 GT and over.

2) Until 1997, single and triple gillnets were measured in units, and since then in metres.

16-2. ULOV I PROIZVODNJA MORSKE RIBE, LJUSKAVACA, KAMENICA TE OSTALIH MEKUŠACA I ŠKOLJKAŠA  
CATCHES AND PRODUCTION OF SEA FISH, CRUSTACEANS, OYSTERS AND OTHER MOLLUSCS AND SHELLFISHu tonama  
Tonnes

|                        | Ukupno<br>Total | Plava riba<br>Pelagic fish |                                     | Ostale ribe<br>Other fish | Ljuskavci <sup>1)</sup><br>Crustaceans <sup>1)</sup> | Kamenice <sup>1)</sup> , ostali mekušci<br>i školjkaši<br>Oysters <sup>1)</sup> , other molluscs<br>and shellfish |
|------------------------|-----------------|----------------------------|-------------------------------------|---------------------------|--|---|
|                        |                 | ukupno<br>Total            | od toga srdela<br>Of that, pilchard |                           |  |   |
| <b>Ukupno</b><br>Total |                 |                            |                                     |                           |  |   |
| 1996.                  | 17 347          | 11 322                     | 9 199                               | 4 189                     | 542  | 1 294   |
| 1997. <sup>2)</sup>    | 16 752          | 10 071                     | 6 996                               | 4 445                     | 571  | 1 666   |
| 1998.                  | 24 668          | 15 659                     | 12 500                              | 5 901                     | 590  | 2 518   |
| 1999.                  | 21 787          | 15 020                     | 10 500                              | 4 267                     | 273  | 2 227   |
| 2000.                  | 24 254          | 17 082                     | 11 226                              | 4 500                     | 282  | 2 390   |
| 2001.                  | 25 698          | 15 892                     | 9 097                               | 4 649                     | 308  | 4 849   |
| 2002.                  | 29 155          | 21 728                     | 12 626                              | 4 124                     | 204  | 3 099   |
| 2003.                  | 26 181          | 19 593                     | 12 271                              | 3 880                     | 184  | 2 524   |
| 2004.                  | 39 954          | 29 951                     | 16 357                              | 5 880                     | 274  | 3 849   |
| 2005.                  | 44 111          | 32 046                     | 16 521                              | 7 623                     | 258  | 4 184   |

1) Podaci se odnose na jestivu i nejestivu težinu ulova.

2) Od 1997. uključen je i uzgoj (proizvodnja) morske ribe i školjaka.

1) Data refer to edible and non-edible fish.

2) Since 1997, including production of sea fish and shellfish.

**16-3. PROIZVODNJA SLATKOVODNE RIBE**  
*PRODUCTION OF FRESHWATER FISH*

|       | Šaranski ribnjaci – ukupno <sup>1)</sup><br><i>Carp fishponds – total<sup>1)</sup></i> |  |  | Pastrvski ribnjaci<br><i>Trout fishponds</i> |  |  |
|-------|--|--|--|--|--|--|
|       | broj ribnjaka<br><i>Number of fishponds</i>  | površina u eksploataciji,<br>ha<br><i>Area in exploitation,<br/>ha</i> | proizvodnja konzumne<br>ribe, t<br><i>Production of consumable<br/>fish, t</i> | broj ribnjaka<br><i>Number of fishponds</i>  | površina u eksploataciji,<br>ha<br><i>Area in exploitation,<br/>ha</i> | proizvodnja konzumne<br>ribe, t<br><i>Production of consumable<br/>fish, t</i> |
| 1996. | 24   | 9 957  | 2 158  | 6  | 2,417  | 354  |
| 1997. | 22   | 9 118  | 2 783  | 7  | 3,316  | 448  |
| 1998. | 24   | 9 124  | 2 909  | 7  | 2,819  | 296  |
| 1999. | 20   | 8 967  | 2 836  | 13   | 3,842  | 471  |
| 2000. | 18   | 8 369  | 2 713  | 18   | 5,676  | 678  |
| 2001. | 21   | 7 887  | 3 350  | 18   | 4,612  | 1 040  |
| 2002. | 19   | 7 786  | 2 549  | 18   | 4,275  | 911  |
| 2003. | 19   | 7 663  | 2 449  | 17   | 4,510  | 791  |
| 2004. | 19   | 7 809  | 2 318  | 20   | 5,704  | 1 075  |
| 2005. | 20   | 6 623  | 3 002  | 20   | 5,774  | 1 301  |

1) Veliki i mali šaranski ribnjaci  
1) *Large and small carp fishponds*

**16-4. PROIZVODNJA MLAĐI**  
*PRODUCTION OF MILT*

u tonama  
*Tonnes*

|        | 1996. | 1997. | 1998. | 1999. | 2000. | 2001. | 2002. | 2003. | 2004. | 2005. |              |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| Ukupno | 1 603 | 1 422 | 1 856 | 2 056 | 1 350 | 1 200 | 1 396 | 1 141 | 1 634 | 1 690 | <i>Total</i> |

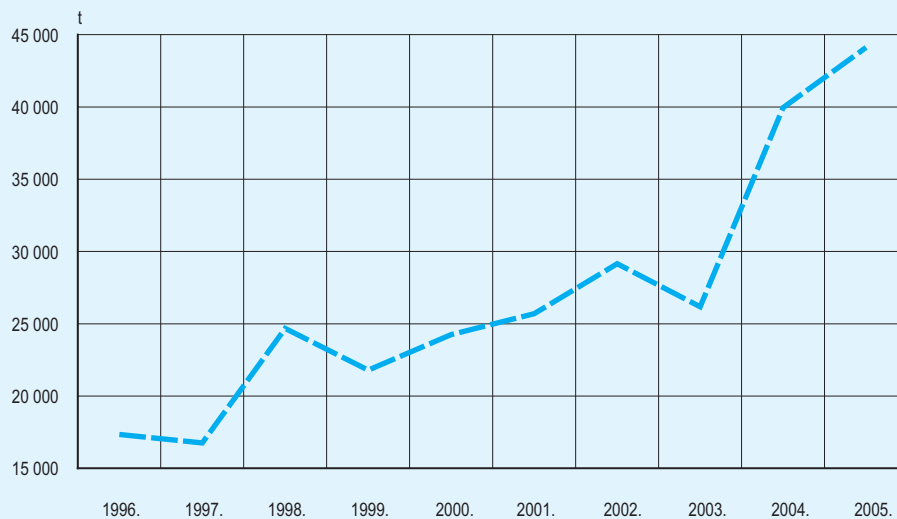
**16-5. PROIZVODNJA SLATKOVODNE RIBE U RIBNJACIMA I ULOV U OTVORENIM VODAMA**  
*PRODUCTION OF FRESHWATER FISH IN FISHPONDS AND CATCHES IN NATURAL WATERS*

u tonama  
*Tonnes*

|                     | Konzumna riba<br><i>Consumable fish</i> |                      |                      |                          |                      |                         |   |
|---------------------|---|----------------------|----------------------|--------------------------|----------------------|-------------------------|---|
|                     | ukupno<br><i>Total</i>                  | šaran<br><i>Carp</i> | štuka<br><i>Pike</i> | som<br><i>Sheat-fish</i> | smuđ<br><i>Perch</i> | pastrva<br><i>Trout</i> | ostale ribe <sup>1)</sup><br><i>Other fish<sup>1)</sup></i> |
| 1996.               | 2 946                                   | 1 994                | 31                   | 71                       | 17                   | 360                     | 473   |
| 1997.               | 3 640                                   | 2 607                | 42                   | 55                       | 20                   | 453                     | 463   |
| 1998. <sup>2)</sup> | 3 205                                   | 2 299                | 18                   | 53                       | 5                    | 296                     | 534   |
| 1999. <sup>3)</sup> | 3 316                                   | 1 993                | 5                    | 54                       | 9                    | 471                     | 784   |
| 2000.               | 3 408                                   | 2 013                | 18                   | 42                       | 7                    | 680                     | 648   |
| 2001.               | 4 408                                   | 2 775                | 9                    | 32                       | 6                    | 1 042                   | 544   |
| 2002.               | 3 485                                   | 1 851                | 10                   | 42                       | 10                   | 913                     | 659   |
| 2003.               | 3 260                                   | 1 633                | 8                    | 71                       | 8                    | 791                     | 749   |
| 2004.               | 3 429                                   | 1 577                | 7                    | 62                       | 9                    | 1 075                   | 699   |
| 2005.               | 4 335                                   | 2 183                | 11                   | 40                       | 9                    | 1 301                   | 791   |

1) Uključena je proizvodnja i ulov linjaka, koji se od 1997. ne prati odvojeno.  
2) U 1998. nije uključen ulov u otvorenim vodama (sportska ribolovna društva).  
3) Od 1999. uključen je ulov u otvorenim vodama samo za obrtnike koji obavljaju gospodarski ribolov.

1) *Including production and catches of tench, which has not been separately surveyed since 1997.*  
2) *Catches in open waters (sports fishing societies) are not included in 1998.*  
3) *Since 1999, including catches in natural waters only for private independent fishermen engaged in commercial fishing.*

**G 16-1. ULOV I PROIZVODNJA MORSKE RIBE, LJUSKAVACA, KAMENICA TE OSTALIH MEKUŠACA I ŠKOLJKAŠA OD 1996. DO 2005.***CATCHES AND PRODUCTION OF SEA FISH, CRUSTACEANS, OYSTERS AND OTHER MOLLUSCS AND SHELLFISH, 1996 – 2005***G 16-2. PROIZVODNJA SLATKOVODNE RIBE U RIBNJACIMA I ULOV U OTVORENIM VODAMA OD 1996. DO 2005.***PRODUCTION OF FRESHWATER FISH IN FISHPONDS AND CATCHES IN NATURAL WATERS, 1996 – 2005*