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 (Lichatowich 1999 ;. Naish at  
al., 2007).  
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 (Ford 2002; Araki et al. 2007).  
 (Palm et  
al. 2003), ,  
 (Schroder et al. 2008),  
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 (Pearsons et al. 2007).  
 (Hilborn and Eggers 2000; Nickelson 2003; Oosterhout et al. 2005).  
 (Dannewitz et al. 2004).  
 ,  
 (Chilcote 2003)  
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 (Buhle et al 2009).  
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(Kostow 2009).  
(Hilborn and Eggers 2000).  
(Wertheimer et al. 2001; Brannon et al. 2004).

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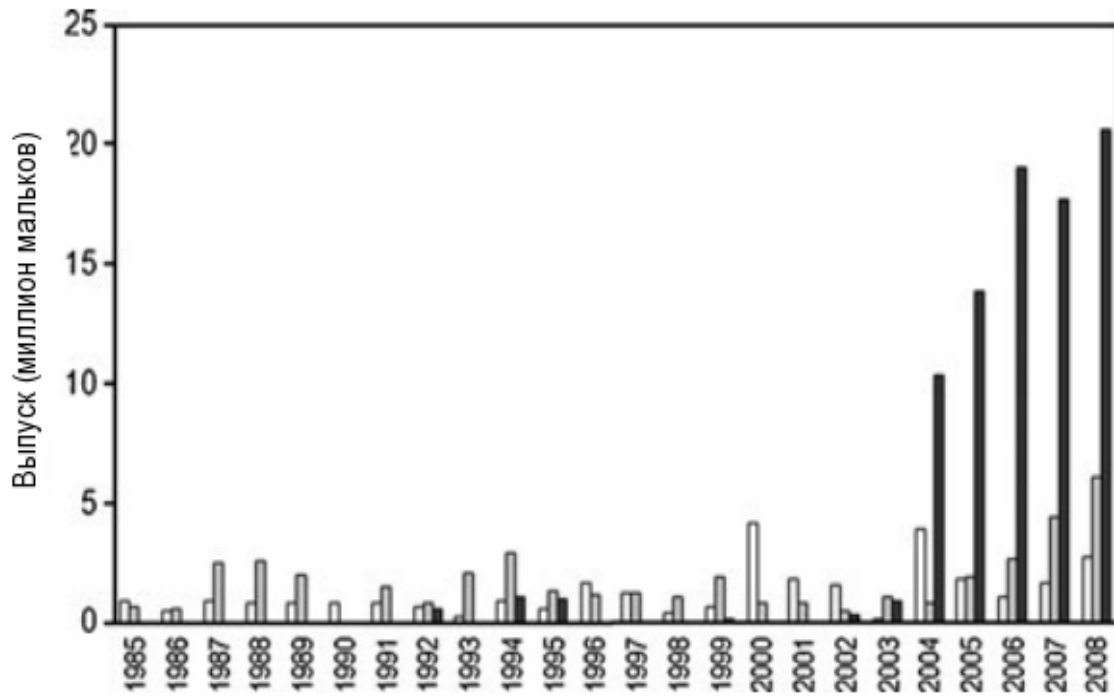
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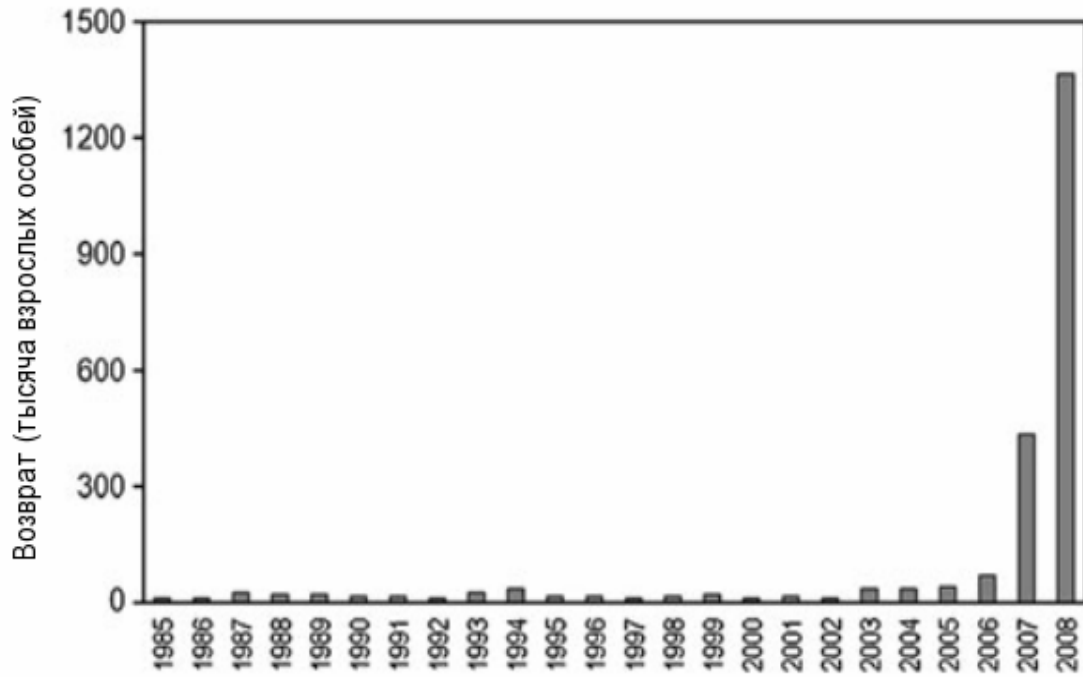
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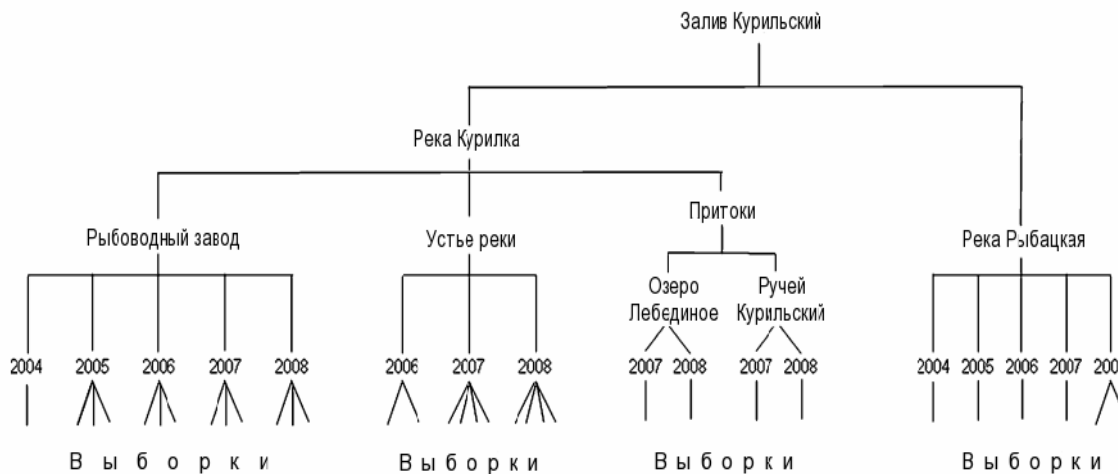


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| <b>2007</b> | 19 | 50 |
|             | 11 | 48 |
|             | 20 | 50 |
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2008

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| 17    | 48 |
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*Ssa197* (O'Reilly et al.1996), *Ssa20.19* (Sanchez et al. 1996), *Ogo2* (Olsen et al. 1998), *Oke3* (Bucholz et al. 2001), *Oke11*(Bucholz et al. 2001), *One101* (Olsen et al. 2000), *One103* (Olsen et al. 2000), *One109* (Olsen et al.2000), *Ots3* (Small et al. 1998), and *Okil* (Smith et al.1998).

*One103*  
*One103.*

18 bp,  
*Okil*,

;  
Okil-1 (180–270 bp) Okil-2 (90–110 bp).

( . 2008).

$F_{ST}$

GDA (Lewis and Zaykin 2001). 95%  
(Weir 1996).

$F_{ST}$

SPSS (Darren and Mallery 2005).

$f_{WA}$

( 2+, 3+ 4+)



2008  
 45.0±6.4%

2004 2005  
 53.8±2.9% 43.3±2.9% 53.3±6.4%

( .3)  
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2007 2008

( 4+ 3+).

2004

2004  
 (p=0.05).  
 ( .5),



2006 ; . 2008).

2008

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0.9],

$F_{ST}$

[0.17, 0.87].

0.43%,

[0.7,

$F_{ST}$

( $F_{ST}=0.14\%$ ,

[-0.02, 0.13]),

0.90% (

[0.57, 1.27]).

2004-2008

( .5)  $F_{ST} =$

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(Blair et al. 1993).

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(Wilson 2006).





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