

Ensuring a global marine protected area network

Zag\an[j]k\dk{q\af'1']=\njgh[Yf\kjYk\&L\akcf\god__Yh\ak[\djkf\-\$Yd\%l\gm__E]eZj\KIY]o\atdk\atdf]\lg]YjeYcj]kgm[\k\\$gj]pYe hd\lg]kYZd\k[dYj\ZYK\df][gf\da\gf\kYf\af\afYgj\k\Yl\o\atf\Yzd\ef\gf\gj\af\Yf\Yhh\ghj\ar]e\YfY[e\fl\g\^e\Yjf]\kd\k\=ph\j\af\Ydg]p\dk\k\ge\gl\]j\hYj\lk\g\^l\]o\g\dk\\$\o\`1'\]=\njgh[Yf\gmf\%l\j\k\gm\dk\Yf\j\ge\>\gj]pYe hd\\$f*((\(\$AM\ F\j\]d\YK\Yj\)\nk\]\n\]j\k\af\g\^a\k\m\af\df\k\gj\k\]\lf\m\h\Yf\j\gYk\Yd\Hg\j\]\l\Yj\Yk\\$\o\`1'\af\[\dth\]k\af\k\j\m\l\af\k\g\^f\af\k\dm\af\Ydk\]\l\k\h\af\%\h\k\`gj\kh\]\p\``Yzd\Yk\Yf\`*-`af\an\m\Yd\[\Yk\]\k\m\k\k\

L'] [Z] f] Plk l g' Pk'] ja k' Yf \ dg [Yd [ge e mfa a k' jg e] klja l f'_ Y [l a n a k' k' jk d [] \ e Yj f'] Yj YK' Yn' Z] f [d Yj dg'] e gf klj Yl] \ \$] & l' jgm' _ Yf' f' [j] YK' f' Pk' j] [jmae] f l &= ME] e Zj j' K Yl] k o' g' Yn' f gl' q' l' Yn' i mYl] dg' a] f l p] \ Yf' \ Pbf Yd k' l'] \ ka f Yl g' g' ^ e Yj f' F Yl mYj Y* (((Yj) YK' %Yd g' f' l'] =p[d hka] =[gf ge f' Rgf] k' %g' f' gl' gf dg' Yn' Y'e gj Yd Yf' \ d_ Ydg Zd b Yl g' lg' g' kg\$ l'] q'o adt Yd g' f' [j] YK'] [gf ge f' [Z] f] Plk' jge \ e Yj f'] j] kgnj] [k] Yf' \ fknj] l'] na' Zd l q' g' ^ l'] a' Pk'] ja k' d \ nk l j q' f' l'] dg' _ l] je &

DYF\%ZYK\] Yf\`[gYKlYdY[\landak[Yf `` Yn]\`hjg\`gnf\`]\`[lkgf\`l`\] e Y%
j\`f\`]fn\`gfe\` f\`is\` &\`l\` jgm\` jmf\%g\`g\`hgd\`m\`_kmZkYf\`[]k\\$e\`af\`jYd
]phdg\`Ylaf\`SYf\`l`\` jgm\` l`\` e YfY\`_e\`f\`l\`g\`jat\`j\`kYf\`[Yl\` e\`f\`l\`k\`
l`\`Yl\`Yj\` \`ae h gj\`Yf\`Yk\`f\`mjkf\`_Yj\`Yk\`gj\`e Yf\`q\`b\`k\`kh\`[a\`k\`-ME\`e\`Z\`j\`
KIY\`kYj\`j\`i\`m\`j\`l\`g\`n\`n\`djh\`Yf\` \`ae hd\`e\`f\`l\`Yf\`A\`f\`_j\`Yl\` \`; gYKlYd
Rgf\`E\`YfY\`_e\`f\`l\`Z\`RE\`!k\`jYl\`_q\`L\`d\`k\`k\`Yf\`]p\`[]d\`f\`l\`m\`f\`j\`jYcf\`_S
o\`a\`o\`g\`m\`d\`f\`k\`n\`j\`Y\`e\`g\`j\` `` g\`d\`k\`l\`Y\`h\`h\`j\`g\`Y\`l\`g\`l\` \`e YfY\`_e\`f\`l\`g\`
e Yf\`f\`j\`j\`k\`g\`m\`j\`k\`Yf\` \`g\`m\`d\`h\`d\`q\`Y\`k\`a\`f\`d\`[Yf\`j\`g\`d\`f\`l\` \`j\`j\`k\`d\`m\`a\`f\`g\`
l\` \`=m\`g\`h\`Yf\`[gYKlYdY\`j\`YK\`Yf\` \`p\`k\`k\`g\`c\`k\`&

AM F [fgl] K¹] j [ʃdārla] g^k n] j Yd=ME] e Z] j K¹Y] K¹g YIY] ` YF ·
Æ hq e] ffla_9_j] e ffl [zθ! lg l']) 10* Mfd] \ F Ylafk; gf n] flafg ·
gf l'] DYo g^v]] K¹Y zMF ; DG K!&L¹ a^θ o gmθ \$Ye gf _k gl' j] 1' af _k\$
j] _ndl] l'] nk] g^Zglge l] Yo dP¹ f _Yf v] fkj] l'] \] kaf Ylafg Yf \ ·
Yhhj ghj@l] æ hq e] f Ylafg g^Y _dʒYZdf] lo gjc g^a_ k] Yk E yjf] ·
hj gl] [i] \ Yj] Yk&@go] n] jSYk qj] fgl YdIMF ; DG K¹Hj la k knthhgj l' Yf ·
f l] jf Ylafg Ydfl Zf \ af _Yj] e ffl &

L'] =njgh] Yf Mfagf Yf \ f\an\an\yD] e Zj] K1Y] k[gndk YC] 'l']
d Y\ Zq\YCa\ _k] hYj Y] [lAgf k\go Yj\kj] \mf\ _l'] djkkg^e Yj\f] .
Zag\an] jkdQ Zq\ *() (Yf\] KYZdk\ f\ _a\ _k] Yk\ e Yj\f] 'hjgl] [i]\ Yj] Y'
f] lo qjckZq\ *() *F qf\ qfd\ qf\ Y[\ a n] 'l'] YI\ _] K1l]] =M[ge e al] \ .

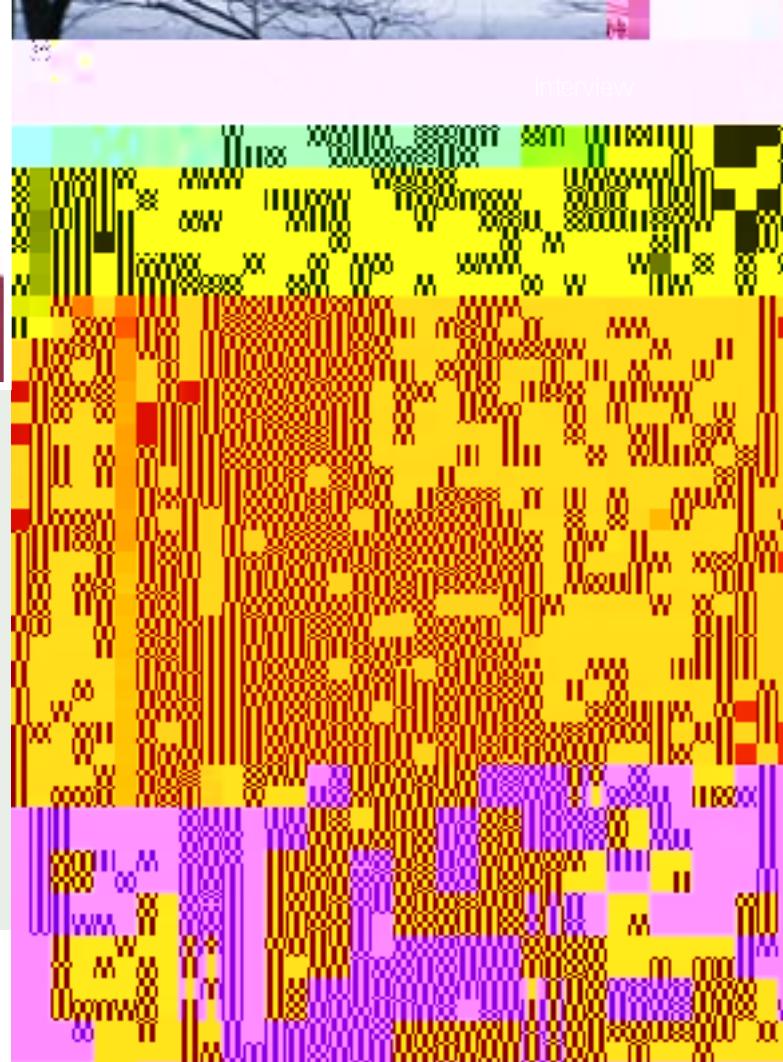
Ig`nja`f_`l`] `O gjd`Kme e d`gf`Knk`Yaf`YZd` <] n] d`he] f`af`*(`*\$Zm`
Ydg`lg`K` go`Zq`pYe hd`l`] hgkd`n`] ^`[Ik` dk`o ad` Yn` gf`e Yj`f`]
Zag`an`jk`d`k` [gk`k`d`k`] e` j` k`d`f` [\$Yf`l`]] [gf`ge`d` Y[land`k`l` Yl`
`] h`f`gf` Y`knk`Yf`] \ Bgo`g`e` Yj`f`] j`kgnj`[k`&

: d`Yj` `] Y`df`] k`gj`l`]] k`YZd`k` e`] f`l`g`^`Y`M`f` j` _m`l`gj`qj`] _æ`] `gj`

TM: In 2005, the European Commission proposed a Marine Strategy Directive, which would see regions implementing measures to achieve “good environmental status of the EU’s marine waters by 2021”. How will “good environmental status” be defined and which elements should be considered?

HP 2 gl' [t] =M: gnf [adg^E af dkl] jk Yf \t] =mjh] Yf Hyjd\re] f l' kmhhgj] \\$af'] \bj k] j Yf _g^t] \j Yf =ME Yf] KljYl] _q < j] [% lan] \$!] af [dkgf g^Y\] Pf dafg f^g^Q gg\=fnajgf e] f l YdKlYlmKO Z! =K! f' t] < j] [lan] Yk'o] dYkl] Y\ \dafg f^g^Yf Yff] p'gf kg% Yd] \ K] jklgljk g^t] =K&L] [\ Yd f_] 'kg^t [gnjk] lg _\t] \] Pf dafg ja' l Yf \ [ge Za'f] Y' a' d n] dg ^Ye Zaagf o a' j] Yd d gZb] [lan] k&

<] k [j h l g j k k g m d \$ f ' e q n a o \$ g [n k l g l '] d j _ k l p l f l ' h g k k a z g f ' l '] k l Y l n k g l '] e Y j f] f n a j g f e] f l ' j y l ' j l ' Y f g f h Y j l a n d l ' h j k k n j k Y M [l a _ a L '] = M ; g m f [a d g ^ E f a k] j k Y f \ l '] = m j g h Y f H Y d l Y e] f l ' Y n j g h l \ \ g j k n z k l Y f l a n d f l ' a M j] f l ' Y h h j g Y [k g f l ' d k k m & f \]] \\$ l '] H Y d l Y e] f l ' h j g h g k k Y f] p l] f k a n d k l g ^ \] k [j h l g j k D l o a] ' Y k d g f _ Y k l '] g m f [a d k l & f m e Z] j g ^ \] k [j h l g j k a f l j g \ m f] \ Z q l '] H Y d l e] f l ' Y j] ' g [n k] \ g f] [g f g e a Y f g l ']] \ m e Y f h j k k n j k g f l '] e Y j f] f n a j g f e] f l & L '] g m f [a d k l] k [j h l g j k Y j] e g j] g l ' f ' g [n k] \ g f l '] k Y l g ^ \] e Y j f] f n a j g f e] f l &



TC: HELCOM has achieved significant reductions in the discharge of polluting substances into the Baltic Sea. How did you reach this?

9; : 2Kf [] T']) 10(k\$!] @] dcf ca; ge e dkgf 'z@=D G E ! " YkZ] f' o gjcaf _lg`æ hgn] T'] : Yd@ e Yjf]] fnjgfe] f! \$d]_] qf] jgm` kge] * ((@=D G E] [ge e] f \ Ylafg k& ej] T' Yf , (g^!] k] Yæ ' lg`æ d' hgdhlgf 'je hgaf l kgnj[k] kmf ` Yk`f \ mkljardhdfr l kYf \ e mf d' hYdo Yk] o Yl] j] Yle] f! hdlf lksqj] 'je `ammk] kgnj[k] knf` lYf \ lYf \ 'Yf e d'f & q'æ hde] flaf _T'] J] [ge e] f \ Ylafg k\$ gYk] Yd [gmflj] k` Yn] ka_fap [Yf lqfj]] m[] \ `k[Yj] k`g`hgdhYf l kYf \ f m] j] f lks] k` Yn] m] d] j] 'je hgaf l kgnj[k] k> m]] je gj] \$f m] j] gmkt` hqgl [lk] j] d] l] \ lg`o Yk] o Yl] j] l] Yle] f! \$hgdtlafg [gflj] g\$o Yk] e Yf Y] e] f! \$e Yjæ] kY] lq\$Zg\an] j] kq[qf k] jnYlafg \$Yf \ T'] ZYff f` _g`lqpa` knz] kYf [k` Yn] Z] f [Yjj] \ gm&

Kf []) 11* \$O) g^!]) . * e Ytqj` hgdhlgf 'O gl` khlkO d' T'] : Yd@ k] Yj] _af` o] j] kmf [] kk`m] d] e f Yl] \ T' jgm` @=D G E ! Y[lnd] k& : Yd@ k] Y`Hgl] [l] \ 9] Yk\$o a` k] jn] lg`hgl] [l] Yf \ j] kglj] k] f k] n] [gkql] e k` Yk] o d] Yk] j] Yl] f] \ Ymf Y`Yf \ Bgj Y`Yf \ bga` f` e gf agjaf _g^!] kY] g^!] e Yjf]] f! nqfge] f! \$o] j] Ydg] kYZdk] \ nf \] j] @=D G E] [ge e] f \ Ylafg k&

TC: What are the most important actions that should be taken in order to secure sustainable fish stocks and thus the fishing industry, in the Baltic Sea?

9; : 2A` gj\] j] lg`e Yf l Yf \ na`Zd] pk` hghmYafg k\$Yd@ [ge e] j] a` d] p% hqja] \ pk` klg[ck` e m] Z] o d` f` kY] Z`agd] d` Ydd@ a` k\$Yf \ Yf] %f l jg% \ m[lqf` hqj] Ye e] 'gj] : Yd@ k] kmj_] qf` k` gm] Z] a` hd[] & l]] pdkf_ _Yf] hgl] f l a`dkhYl a`dYf \ 'gj] l] e hqjYd[d] k] k`g`pk] j] k] Yj] hgl] f l a`d lggd] lg`hgl] [l] e hqjYf \ Yf] Yk`g`pk] k`Yf \ Zj] k`k9`_gg]] [gqf_ a` Yd k] Yl m`g^!] k] Y`Yf \ 'Yngm] YZd] [gfk] jnYlafg k`Yl m`g^! pk` klg[ck` Yf` gf qf] Z] Yf \ 'gj] l] jgm` Y` gdkf` hhhjgY` & f` d` [gfl] pl\$ a` k` Ydg` æ hqjYf \ lg] f \ Yf] f` k` Yc] ` g] j] \ a`d] m] a` g] j] lg` Yng] hgl] f l a`d Yf \ e da` Yl]] pdkf_ \$[gfb] l kZ] lo]] f \ pk`] j] k` Yf \ T'] hgl] [lqf`

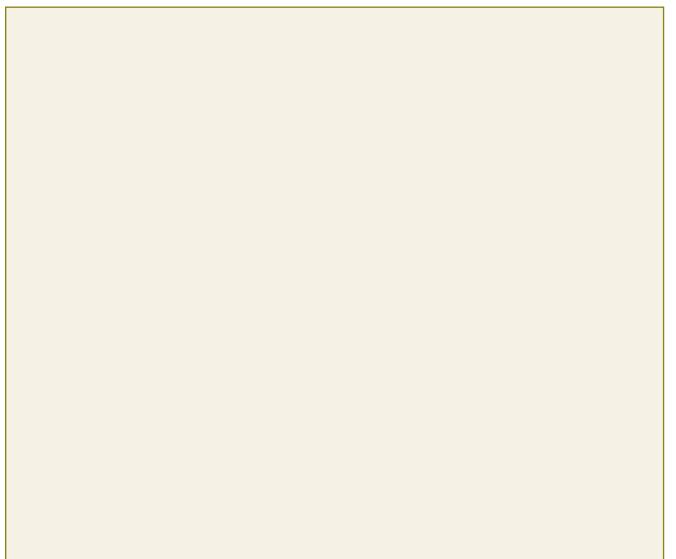
g^! Zg\an] j] kqfL` k` Yk`g`Z] \ gf] a` 'gj` Yknf` Yk]] : Yd@ k] _af` Yd z] k`] j] k` 9\ nqgj q] ; gnf [a&

@=D G E ! Yk`f g`e Yf \ Yl] 'gj` e Yf Y] 'pk] j] k` k` T'] : Yd@ k] Y`Zm` Yk` l`] j] khgf k] a` d] q] l] f] knj] T` Yl` pk] j] q` a` [gf \ m] l] \ af` Y`kmtk] Yf` YZq` o Yq`L` dk` [Yf Z] Yl` a` n] \ T` jgm` Yhhjgjh] a` d] f` %] je e Yf Y] e] f] l` g^! : Yd@ k] Y`pk] j] k` l` s] Yk`hgnak] \ 'gj` Zq]] =M` ; ge e gf` >k] j] k` Hgdf` q`Yf \ T`] Yj] e] f l kZ] lo]] f] T`] =M`Yf \ T`] j] mkk] f` >] j] Ylafg &

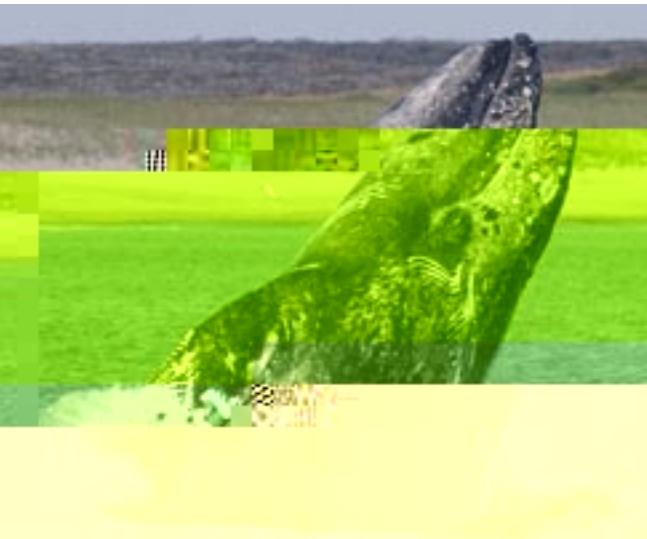
TC: The Baltic Sea, except for the Russian part, is governed by EU legislation. What is the added value of HELCOM, and how do you see your role vis-à-vis the European institutions?

9; : 2A` k` l] m` T` Yl` @=D G E ! Yk` Y` lq] %f hYdhY] e Yf q` g` d` k` hgd% [a` k\$` mta` k` Yf \ o gjcaf _e] l` g` k` o Yc] g^! =M` f d] j] e] f l` Yf \ T`] \ n] d] hqj] f l` g^!] =njgh] Yf \ E` Yjf] k] jy] _q` @=D G E ! o a` d` [gfl` f m` l` ig`hdq`Yf` æ hqjYf \ jgd` f` T`] [ggh] j] Ylafg` o d` \ n] mka` o` d` \ k` nd` Yd` lq] f knj] Y`] Yd` q` e Yjf]] f nqfge] f l` f` T`] : Yd@ k] Yj] _af` Yf \ o` Ydg` \ Yn] Y` [d` Yj` jgd` f` \ n] d] hqf` _Yj] _af` Yd` kh] [d` [YhhjgY] \ lq] f`] \ k` g^!] : Yd@ k] Y\$` a` [d] k] [ggh] j] Ylafg` o d` T`] =njgh] Yf \ M` a` g`f &

@=D G E ! k` [m] f l d] o` gjcaf _gf` Yf` Ye Z`agnk` : Yd@ k] Y` 9[lqf` Hdf` \$o` d` \ Yk` Z] f` o` k] d] j] Yd] \ Yk` Y` hqf` h` g] [l` g] T`] =njgh] Yf` k] Yknf \ j] l`] h` ghgk] \ =M` E` Yjf] k] jy] _q` < j] [l] n] & a` \ a] j] k` d] q` a` [] f l` Yd] l` @=D G E ! & nqgj` g^!] Yd` q` k] Y` Yf` k] jn] k` Yk` Yj] j] f`] 'gj` l`] h` j` g` e Yf` [] g^!] 9[lqf` Hdf` & L`] =njgh] Yf` ; ge e dkgf` \ k] jy] \ l`] : Yd@ k] Y` 9[lqf` Hdf` Yk` O`] [g] f] j] k] g] [g` j` m] l`] Y` lqf` O` T`] : Yd@ k] Yj] _af` Yf \ Ydg` nf \ j] df] \ T` Yl` a` o a` d` Z`] a` k] j] m` f l` Yd] T`] kmf [] k` m` d` h` e] f l` Ylafg` g^!] f` o` =M` E` Yjf] k] jy] _q` f` T`] j] _af` g` a` a` \ gg` l`] f` a` H` d` j` [] V` g` @=D f`



L`] 'E] \d]jjYf] Yf 'e gf c'k] Yd\$Monachus monachus\$'k'gf] 'g'^`] jYj] k'
k] Ydkh] [q'k'Yf\`gf] 'g'^`] 'k'p'e gk'] f\Yf__j] \ e Ye e Ydk'gf 'gnj'



Conservation of Critically Endangered western Pacific gray whales

By Sarah Gotheil and Julian Roberts, IU o ltp e ly E

o ltp e ly E

kyk

L^] o[K]jf HY[δ [hghm\lafg' g^_jYq'o Yd k' (*Eschrichtius robustus*)
 \gf' g^gf\qf log\knjnanf _hghm\lafg{k' g^_j\k[k] [a_k\k' l^] o gjd&
 : gl' hghm\lafg{k' o]] Zjgm_ l^f] Yj'lg] plaf[laf' Zq[ge e] j[z\do Yd
 af_\&L^] YK]jf HY[δ [hghm\lafg{\$\\$o\$} \d^_e a_jY] K\Yffm\Ydt[Z]lo]] f'
 E] pa[g Yf\Yd\k{c}Y\$ Yk]] [gnj]] \kmZkYf\l\dt] jge k[nj]] \] hd laf'
 Yf\Yf go f'me Z]jkYZgm^*(\\$((\d^_a\anam\ydk& q[ge hYj\k{g\$\\$}] o)k%
]jf HY[δ [hghm\lafg{\$\\$g\$} o]k]jf _jYq'o Yd \$o \d^_e a_jY] KZ]lo]] f'
]YK]jf j\ntkk\Yf\Yf \d^_a Y\$sk] k\ae Y] \YIYZgm) +(\d^_a\anam\ydk\$oa^
 gf\qf^*-D+-]j] h\jg\m\laf] j'e Yd k\&K Yj] kmd\$\\$] o[K]jf _jYq'o Yd
 \YKZ]]f \d\k] \YK 'Critically Endangered' f' l^] AM F U] \D\k\g^
 L^]jYI]f] \Kh] [a_k\k' l^] a_ k] YI]_gj\q\g^_j] YI! Yf\ \d\k' l]j] \gj] Y'
 [qfk] jn\laf' h\aj\q&

L`]`]` o knjnnaf_` Yf æ Yd` Y[` Yf mæ Z] j g^hgl` fla/d` YrY] \k\` jgm` %
gml` l`]` j Yf _` \$f [dñhaf_` [gdfk f k o d` K ahkSfn\`]` j o Yl` j f gk` \$
f l` Yf _de` f l` f` pk` _`]` Yf Yf \` e g \` b [Ylafk g` k` l`]` j h` qk` Yd` YZd` Yl` &
@go` n]` j \$hYj l` a m d` j [gf` []` j f k` Yn` Z]` f j Yd` \` YZgml` l`]` æ hY` l` g^
g` k` g` j` g` d` Yf \` Yk` Y[l` a d` k` Yd` f` l`]` [g` Yk` g` KYc` Yd` Ad` f` \` \$
=Yk` l` f` j` m` k` a` &

Building bridges between industry, governments and conservationists

L'] o Y] jk g^KYC Ydf ddF\ Y] g^hYj l[m\] kaf\ f\ b[Yf[] lg\] ' [gfk jn\ Ylaf g^v] ' o] kl] jf_ j Yqo ' Yd \$YKl] ' gf\ qf\ cf\ gof '] \af_ _jgnf\ k' g\j l' ak'hghm\ Ylaf d\ f'] k] o Y] jk\& l'] Y] Y\k Ydg\ ja' ' g\adYf\ _Yk\] hkgd\ k\$o ' a' ' Yn] Z] f] phd\] ' Yf\] phd\] ' kf'] ' f'] e\ a') 11(k&f\ hYj l[m\] \$l'] Sakhalin II g\adYf\ _Yk\] n\ qf\ he f\ l' h\g\] l[k' a' [d\k] h\gpae d\q\lg\] '] gf\ qf\ lo g\ a' f\ f\] '] \af_ _Y] Ykg\] ' o' Yd k&Akg\ h] Ylaf\ K\Y] ' mf\] j Yc] f' Zq KYC Ydf\ =f'] j_ q\ f\ n\ kl% e\ f\] ; ge hYfq D\&KYC Ydf\ =f'] j_ q\ f\ Yf\ j] h] k\ f\ K\l] ' dj_ kl' a'] _Y] ' g\adYf\ _Yk\ h\g\] [f'] ' o\ gj\ &

Kaf [] * ((. \$AM F `` Yk\o gjc) \o d` KYc` Ydf` =f] j\q\af` gj\] j\lg\hjgnak\ Y\nd\] Yf\] j [ge e] f\Ylafgk\gf` go\ l`] [ge hYf\q [Yf\ e\ af\æ\ ar\] j\ck\ Ykkg\al\] \o d` \ak\ghj] Ylafgk\lg\l`] o` Yd\kYf\ l`] j` YZd\Yl\&9k\gf` hYJ\g\l` \ak\Zjg\Y\ af\dl\l\] \$af` * ((. \$AM F [j] Yl\] \YhYf\ dg\af\] % h\] f\] f\] k\] \af\] \dk\] \D\]] O\] k\] jf` ? j\Yq\O` Yd\9\ndkgj\q\Hf\] d\] o\] q\` h\] j\gnak\] k\k\] \af\] \dk\] [Y\nd\] Yf\] j [ge e] f\Ylafgk\gf\ l`] [ge hYf\q\Q\ gh\] j\Ylafg\Ydh\] f\k\Yf\ \e\ da\Ylaf\] e\] Ykn\] k\&

K]n]jYdknf[[k]k]k^Yn]Z]]f[Y[~]q[n]\Vkg^Y]sf[dthkf_`l]j)%gntf_`
g^Y`]nf]joYl]j'hkf]df]k'Zq^KYc`Ydf=f]j_q\lg^Yngak`l]o`YdK0
`l]f\g^Y]Yk3l`]k'Yjf_g^YIYZ]lo]]f[l`]f`]h]f\]f]k[aflak`
Yf`l`]k[aflak`Ykk[g,a]l]\no a`l`]f`]mkljg3Yf`l`]YkkjYf[[`l`]YI`Y
jgZmk`k[aflak`e gf agjaf`hjg_jYe e ``YkZ]]f`f]l`_jYl`\VZq^KYc`Y%
df=f]j_q\lg^Y]`l`]q`gh]jYlafYd[q]d &

AVF F Q] f_Y] e] fl_o a] KYC Ydfl_f] j_q_ksYf] plj] e] d] hghkd]n] \] %
n] d] he] fl] 'gj l] [gf_k] j n] l] yf g^l] ak] j d] [Ydt] f] VYf] _]] \ hghmd] l] yf
g^_j Yq o] Yd k&go] n] j s] ak] [g_f_k] \ l] YI Yf q] [ge h]] f] kan] [gf%
k] j n] l] yf e] Yf Y] e] fl] f] d] a] l] e] m] k] [gf_k] l] j l] [m] d] Yf] _] g^l] j] YIK
lg l] hghmd] l] yf &>gj l] ak] Ykgf \$AM F Yae k] n] fl] m] dt] lg z] g] Y] f] l]]
k] [gh] g^ak] ^gj l] k] lg a] [dt] Ydle Ytj] k] YC] g] dk] jk] k] l] e] aj] l] yf
Y] Yg^l]] o] Yd k] Yf \ Zjfa_dk] pl] f] kan] f] logic g^k] k] a] f] l] dk] lg g] [nk
l]] Z] k] YnYat] Zd] k] [a] f] l] p] [f] g] e] Yl] yf gf l]] jyf] _] g^ [j] d] [Yd] j] YIK
Y] [f] _] l] ak] hghmd] l] yf &

9 k E Ygj mf [] j Ygj f a k YZgm l] ' hghm\lafg \Q k Yl n k Yf \ l] ' o \ Yd k O
Zg d\ q j e Yf \$Y [g d\ Zgj Yl a n] ^ gj l Z lo] f ' gad [ge h Yf a k Y [l a n] ' g f
l] ' K Y C ' Y d f ' k] d s j Y f _ k l Y l k Y f \ g l] j ' h Y f l j k k j l i m j] ' l g k Y %
_ m j] ' l k [j d a Y d t] f \ Y f _ l j] ' hghm\lafg & l k] ' gj l k o a d] f ' Y f [l]
l] ' hghm\lafg \Q [Y f [k g j] [g n] j q Y f \ k n j n a y &

[`de YI] %f\m[\`Yf_\`k\`lg\`kh] [a\`kj\`Yf_\`Yf\`\\`k\`jh\`laf\`k\`lg\`gg\`o] ZK\`Yj] o\`a\`d\`g[m\`f\`]\`f\`ljj] k\`l\`jd[d] [g\`k\`q\`l] e\`k\`z\`&\`H\`y\`e] K\`Yf\`\\`Q\`g\`\$*((+!;&`Yf_\`k\`f\`kh] [a\`kj\`Yf_\`Yn\`Z\`]\`f\`j] [g\`j\`]\`g\`e Y\%j\`f\`] Z\`g\`a\`j\`k\`d\`q\`f\\$[d\`h\`m\`h\`d\`f\`cl\`g\`k\`]\`j] n\`a\`o\`Z\`q\`@Y\`q\`k\`e\`t\`a\`l\`\$*(((-!\$9\`f\`Yj] [d\`c\`j\`a\`d\`2\`l\`c\`f\`k\`g\`f\`e\`t\`a\`l\`\$*(((),`!\$e\`Y\`f\`]\`p\`k\`H\`j\`j\`q\`e\`t\`a\`l\`\$*(((-!`Yf\`\\`d\`Y\`]\`j\`Y\`c\`l\`r\`l\`d\`k\`\\`D\`e\`m\`o\`c\`h\`e\`l\`y\`c\`i\`a\`c\`e\`a\`c\`e\`E\`Y\`g\`Yf\`\\`@Y\`q\`k\\$*(((),`!&@go\`n\`j\`]\`k\`Y\`z\`d\`k\`f\`_[\`Y\`r\`k\`Y\`d\`]\`d\`l\`a\`f\`k\`d\`h\`k\`Z\`l\`o\`]\`f\`k\`h\`] [a\`k\`\\`k\`j\`a\`z\`m\`a\`f\`k\`Y\`f\`\\`h\`q\`k\`Y\`d\`Y\`l\`m\`j\`k\`s\`m\`]\\`Y\`k\`o\`Y\`l\`j\`l\`e\`h\`j\`Y\`l\`m\`j\`\\$\\`e\`m\`e\`g\`]\`a\`p\`[m\`n\`d\`]\`Y\`f\`g\`f\`d\`f\`\\`m\`l\`g\`l\`]\`h\`q\`k\`Y\`d\`a\`p\`[m\`n\`d\`k\`g\`g\`[\`g\`d\`][\`f\`_\\`Y\`Y\`Y\`f\`\\`l\`]\`d\`[c\`g\`g\`d\`f\`_]\`je\`e\`g\`f\`a\`g\`f\`_&G\`f\`]\`g\`l\`]\`j\`o\`d\`f\`_]\`je\`k\`l\`n\`k\`a\`k\`[g\`e\`k\`j\`g\`e\`l\`]\`;\`g\`f\`l\`a\`n\`g\`n\`k\`H\`d\`f\`c\`l\`g\`f\`]\`j\`g\`j\`]\`z\`H\`l\`k\`n\`j\`q\`o\`a\`\\`o\`Y\`k\`Y\`l\`j\`]\`f\`]\`)\`1\`..`Y\`f\`\\`Y\`k\`g[m\`f\`]\`f\`m\`]\`j\`g\`r\`k\`Y\`f\`]\`k\`a\`f\`k\`H\`d\`f\`c\`l\`g\`f\`]\`Y\`f\`\\`h\`g\`j\`l\`Y\`f\`]\`f\`a\`\\`Y\`l\`g\`j\`g\`l\`]\`\\`H\`Y\`l\`k\`g\`g\`[\`d\`e\`Y\`]\`[\`Y\`f\`_]\`g\`f\`e\`Y\`f\`]\`]\`g\`k\`q\`l\`]\`e\`k\`Z\`]\`Y\`n\`k\`]\`l\`]\`q\`Y\`j\`]\`k\`g\`j\`\\`m\`]\`\\`o\`a\`\\`Y\`k\`l\`g\`f\`]\`j\`d\`l\`a\`f\`k\`d\`h\`k\`Z\`l\`o\`]\`f\`l\`]\`j\`a\`h\`g\`h\`m\`l\`a\`f\`\\`q\`f\`Y\`e\`a\`k\`Y\`f\`]\`f\`n\`a\`g\`f\`e\`f\`l\`Y\`d\`[\`Y\`f\`_]\`\$[Y\`f\`]\`k\`h\`g\`f\`\\`Y\`h\`a\`d\`j\`Z\`q\`f\`]\`j\`Y\`k\`f\`_]\`g\`j\`]\`g\`f\`l\`j\`Y\`f\`_]\`j\`a\`Y\`f\`]\`k\`Y\`f\`]\`Y\`f\`]\`f\`g\`l\`[g\`e\`e\`]\`j\`a\`d\`t\`p\`h\`g\`f\`]\`\\`@Y\`q\`k\`e\`t\`a\`l\`\$*(((-!>n\`j\`]\`e\`g\`j\`]\`\$[\`l\`]\`q\`h\`j\`g\`n\`k\`]\`g\`n\`j\`]\`Y\`d\`g\`l\`]\`\\`d\`Z\`Y\`d\`h\`j\`e\`Y\`j\`q\`h\`j\`g\`m\`l\`a\`f\`]\\`j\`a\`Y\`j\`]\`k\`g\`f\`]\`Y\`f\`]\`K\`[\`g\`e\`Y\`f\`\$*(((),`!&

L'] ; HJ 'YIYKJ] ^ Ykj[n] Yd \ kæ dfl \ \kjk\thla\gf klg\gg\ o] Zk'Yk'
 l' gk\ 'gnf\ \f'1jj] Klj\rdkqkl] e k&L'] ge fangjgnk[gh]hg\ 'zCalanus
finmarchicus\$'gj] pYe hd \$k\Yf\ æ hqj\Yf\ 'gg\kh] [ak'gj] e Yfq'\
 Pk\ 'Yf\ \f'1]] 1. (k'[gfklam]\YZgm]/(t'g^Yd\rgghd\fclgf\f'1])
 F gjl\ '9ld\fl\G [] Yf\ 'Yf\ \Y\ly[f\k] Yk\< YIY\f\q[YI] K1\ YI\f'1])
] Yb b " qf]] ge k&5 \ khQ j\ nf ffe f fZ ff A [] .

] a *af* R° E E E I \mk`Yf" k m *f*



AM F JG ≈`k[k] llf_`m[Yp%] Yj_`_dgZYdfaa[la]n Ig`Y\j] kk`kge] g^`
l`] c] q`kkm[k`g^`] E] kKj_`_`ge `Hj`k`Yf\`] =M; gmf [ad[gf [dh%
kagf k\$af [dhfa_2

Lg'kj] f_`_] f [nadgk[a] lq'Yf\`ae hd'e f]`[YhY[\u00d1q%ma\k_`
hj,g,jYe e] k`gj'Yd]` d[nYf\`klyc]` g'd]`jk3
Lg'f[dm]` Zag\`an] jkq'Yf\`] [gkqk]e`k] jnaf` k`f` hg'd]`q\`a\qy_m]`
hj,g[] k]k]`kYf\`e Yf'kj] Ye`Zag\`an] jkq'qf` fYlafg YdYf\`j]`_af`Yd`
\`n] qhe] f`l`k]Yj]`_a] k]Yf\`hd'fjk3
Lg'f[dm]` Zag\`an] jkq'Yf\`] [gkqk]e`k] jnaf` k`f` \`n] qhe] f]`
[ggh]jYlaf` h'j,g,jYe e af_3
Lg`\`n] qhe`Yf\`kmhbj`l`]`m]` g^af`f`gn`Ylai]` p`f`Yf[\`rde]`[\`Yf`k`e`k3
Lg`\`n] qhe`Yf\`g`]`f`]`Ye] o`gjc`Yf\`Y`hd`l`g`e`g`^`pl`Yf_\`Yf\`
`a\qy_m]` gf`Zag\`an] jkq'Yf\`] f`n`g`f`e] f]`f`G`n]`jk]`Yk` gmfl`j`a`k`
Yf\`L`jj`a`g`j`k3Yf`
Lg'Z]`l]`j`[ge`e`nf`a`Yf`]`gf`f`]`ae`hgj`Yf`[`]`g`^`Zag\`an] jkq`g`j`Y`
kmk`Yf`Yz]`]\`n] qhe] f`l`&

>gj e gj] ḫ' yje Ylafg h' d' Yk] [gf l Y[i ' Yf % d'mk] 'B[i m] k
ż] Yf % d'mk] &[i m] k8 a[n f &j_!&

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=pl] f\`f_\`AM F=\`nigh] @f] logj c\`lg\`l`] k` gj] kg\`l`] ; Ykhaff
Af` B'f m\`y q^*(/\$AM F` J` _\`gf Yd< j`] [gj` LYe \`kE Yj`_] k[mie] l'o d`
l`] E` f\`dk] j` g^= [g\`d\`q Yf\` V YlmjYdJ] kgmj[] kg\`g^9r] jZY\`bf \$E j @mk%
kj\`f: Y\`agn\&L`] E` f\`dk] j` gm\`df] \`l`] h\`gj,j] kkg\`g^9r] jZY\`bf @f\`l] jf Yc
hj] hYjYl\`gf k` gj` AM F` e] e Z] jk\`h\`Yf\` h\`aj\`d\`k` gj` [g\`d\`Zgj Yl\`gf` Z` %
lo]] f` AM F` Yf\`V\`l`] \`m\`mj] E` e Z] j` KIY] `9r] jZY\`bf` o] j] \`dk[mkk] \&
L`] k] \`dk[mkk\`gf k` g[mk] \`af` h\`Yj\`q m\`d\`gf [YhY[aq`Zm\`af`_o] d` f\`l`]
_gn] jf e] f] Yd[gf k] jnYl\`gf` k] [lgj\$] [g\`g\`gnj\`ke` Yf\`V\`l`] e Yf Y] e] f]

IUCN's vision

9 b'rdl o gjd l` Yl nYdm] kYf\ [gfkjn] kfYlmj] &

IUCN's mission

Lg` afBm] f[] \$] f[gmjY_` Yf\ ` Ykkkl` kg[al] k` l` jgm_ gm` l`] o gjd` lg` [gfkjn] l` `af] _jq` Yf\ ` \an] jkdlq` g^fYlmj] Yf\ ` lg`] fknj] l` Yl Yf q` nk` g^fYlmjYdj] kgnj[] k`k] i mlyZd` Yf\ ` [gdg_d` Yd] k`nkl` Yf` YZd` &

ROfE's mission

Lg` gkl] j Yf\ ` gjl` aqY =njgh] Yf` f] lo gjc` g^] p[] d% df[] `af`] fnjgfe`] f` Ydj] k] Yj[` \$hgdf` q`Yf\ ` Z] k` h] Y[la] \$o a` l`] Yae` lg2`) &` gfijazmt] lg` AM` F` Q`_dgZYde` akkgf` *`Kmhhgj` l`] `af] _jYlaf` g^Zag` \an] jkdlq` [gfkj] % nYlaf` af` lg`] [gfge` \` n] djhe`] f` +&Kmhhgj` l` f` fgnYlaf` af` d` l` l`] e` mda` hm` a` a`

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