

0, ''/(/\$. (

85%\$1 /\$. (6), 6+(5, (6 678' <



)LVKHULHV \$VVHVPPHQW E\
* %XUURZV DQG 5 3DLVKHJZRQ

5HSRUW E\ \$ &RUVWRQ 0 *LOOHVSLH DQG -

9DOH /LYLQJ ZLWKD XUNHQW & BQV8QHL 2B WDLUWR 6XGEXU\
)RU IXUWKHU LQIRRUQV DWEWQU SORHDOXHXHQV LNDQXEQD #OD

0, '(/\$. (
 85%\$1 /\$. (6), 6+(5, (6 678' <

, 1752'8&7, 21

0LGGOH /DNH f ¶ ' 1 f ¶ ' : GLZLDWKLQKWKOH&IHWORRFD*
 6XGEXU\ LQ %UR<BV WQZQPDKLCS E B WIPQGGZILSWKK DR PD [IP) LJXU
 \$ FRPSOHWH VXPP<DUBFWSKULLVWODDECFBQ EH VHHQ LQ 7

0LGGOH /DNH LV DHFURDVGIRIE\ (SWHYDSSUR [KFDUWHDDU VHDV

0(7+2'6

)LVKHULHV &RPPXQLW\ \$VVHVVP HQW

,Q WKH ILVK FRPPXQLW\ RI OLGGOVR/DKHI ZBU G/LDFP SOGHG

SURWRFRO \$SSHODEH DJG 6QXRLQ VWLQJ SURKENGQHUM ZDV G

LQ 6FDQGLQDYLD D[OGK VLYEIH O FXQVAGWDRUW KHLQVW HU 6H

al WR DVVHVEX OCB IQFHODDQGL YBLHPLDWVDRQIGLSUKR VLGH ELF

LQIRUPDWLRQ RQ SRSXODWLRQ VWDWXV 0RUJDQ DQG 6QXF

\$ WRWDO RI PXOWL PHVK JLOOQXVW ZHUH VHW1 HQV LZHQ

IRU DSSUR[LPDWHORO\ KRXUV DMGHODQGRW LDFURVQ PXLWLSO

VWUDWD QHWWVLQQ P QHE QHWV LQHWV LQ ±

)LJXUH VKRZV WCB OIRFOQLVQW BWDLQ JOMKGOVX/DYHH

\$OO ILVK FDSWXLHGGWZHVSHLFLHQVWLQ GRWB OLFDHG LEQIRUWDWL

IRUN DQG WRWDQKWHQJWK PP ZHL

FRQGXFWLYLW\ WRWDDONIDDIHQHFWALFGEISURELQ H G QGJ PDH WDOV
LRQV

7KH VDPSOLQJ ORFDWLRQ IRU ZDWHU TXDOLW\ FDQ EH VHH

)LJXUWKWOLQH PDS RI 0LGGOH /DNH VKRZLQJ W
VDPSOLQJ JHDU RU FROOHFWHG RUJDQLVPV

5(68/76 \$1' ',6&866,21

)LVKHULHV &RPPXQLW\ \$VVHVVPHQW

\$ WRWDO RI ILYH VSHFLHV ZHUHESODIOWSUSXPSNLQVHIQRUWK

Lepomis gibbosus \HOORPeraflavescens ZDOSantheitreus DQG ,RZD GDUWH

Etheostoma exile 2WKHU VSHFLHVYRBYXMUQHGWLQFSX&UYEHRZQLF

EXOOAmeiDro nebulosis DQG VPDOOPropterus deDnev ZHUH QRW VHHQ L

&RRSHUDWLYH)UHVKZDWHU (FRWRWDQZLHWJKW J 7RQGD

7D80DWFK VXPPDU\ DQSH&18(VIRDSVXUJH&O\Q 0LG)GOK ZDNHH QRW
LQGLYLGXDOZHZHJKWKHG DQ&W&D(XUHCPHW VRQ DMRWDDVQISW ELRPDVV
IRU WKDW VSHFLHV

)LVK 6SHFLHV 7RWDQPSOHLJJKW&38(&38(
&DWFK6LJH:HLJJKWLVK QHWQHW
J

1RUWKHUQ 3LNH
3XPSNLQVHHG
<HOORZ 3HUFK
:DOOH\H
,RZD 'DUWHU

7RWDO

7KH QRUWKHUQ SLNG W B WDKOWLHQ JWKVPU DCRJLQJPPURZQO\ R
ZDOOH\H ZDV FDXJKWRWQO OHZLJWKPRDU\ RPPR\$SKRORJLFDQ
LQIRUPDWLRQ IRU QDQWKHHUFCSENHLYDQIQ ZQ \$SSHQG

<HOORZ SHUFK OBQJWKVLODQVWQDPPRPS PP WR
RHKREdQ\$0• POp€P`°P`đ À0`°0 00À 0@”À μP€0 À0 -

<HOORZ SHUFK ZDQGDQHW PVSJWF LDH V HEQWN QJQ RI UWIKSHU HMR W D
3 R XedL Q

)LJX6\$HFLHV GLYHUVLWVWLVK'DQ'ORXHV'URH 0LGGOH /DNH

%DVHOLQH 2UJDQLVPV

1R FODPV RU VQDIGOMURF UHLGBOHBNH \$PDSURQLEHPDZWHUH FRO

DW YDULRXV ORFDWLRQHV \$URRXVGLORZGHOJKWDSWDXUHG LQ W

YDULRXV ORFDWLQJMHDU7ZXRQGQFLGGQHWDO FUD\ILVK

1R DTXDWLF SODQWV ZHUH FROOHFWHG IURP 0LGGOH /DNH

:DWHU 4XDOLW\ \$VVHVPHQW

\$W WKH WLPH RI WKW WROJGVXUQBH WKBGDBO/DNHWZDDWLILH

\$33(1',; ,
0RUSKRORJLFDROUWVWDOUSUNHQG ZBDOOHVHUS IURP 0LGGOH
/DNH -XO\ ±

\$JHLQJ
6WUXFWX7LVVXH
6SHFLHV)LVK)RUN 7RWDO HLJKW 6H[0DWXULW 1RQH 1RQH
/HQQJW/HQQJW' J 0DOH ,PPDWXUH 6FDOHV)OHVK
PP PP)HPDOH 0DWXUH 3HFWRUDO 5WRPDFK
8QNQRZQ8QNQRZQ 'RUVDO 6SLQ'P QDGV
' \$ 2WROLW\$:KROH)LVK
' % 2SHUFXOX'P*HQHWF
' &OHLWKUXP

1RUWKHUQ 3LNH	\$'
1RUWKHUQ 3LNH	\$'
1RUWKHUQ 3LNH	\$'
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:DOOH\H	\$